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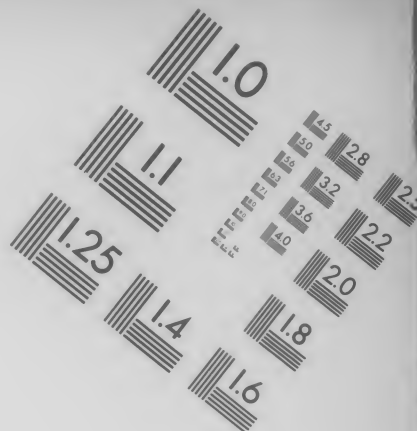
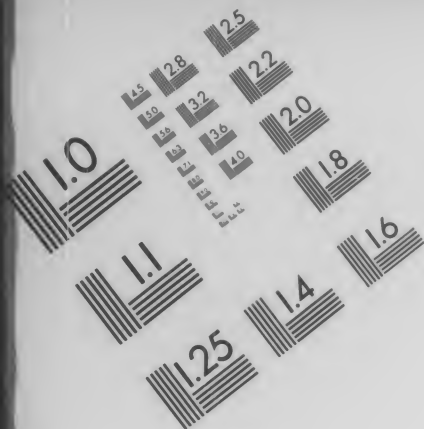


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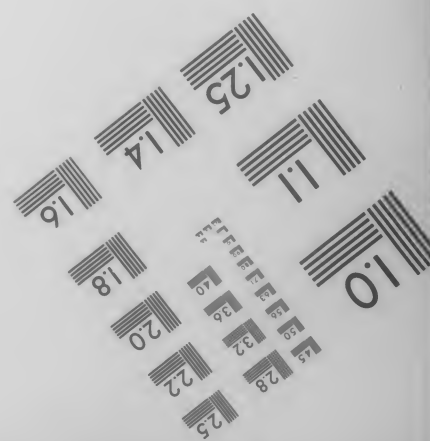
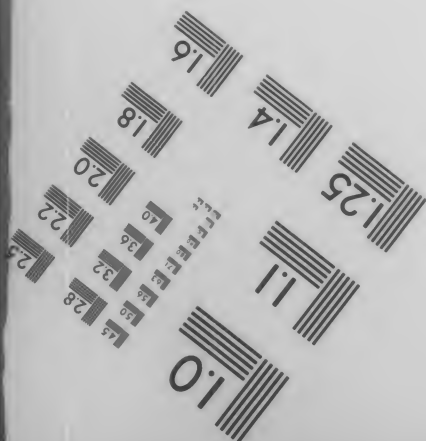
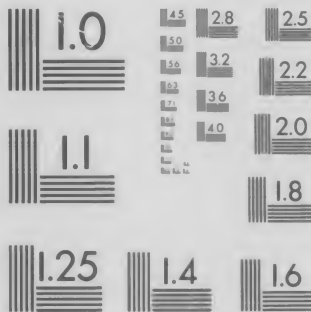
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THE GREAT PROBLEM
OF

SUBSTANCE AND ITS ATTRIBUTES.

INVOLVING THE RELATIONSHIP AND LAWS
OF MATTER AND OF MIND
AS THE PHENOMENA OF THE WORLD,

DERIVED FROM

THE ABSOLUTE.

"This unifying conception of Nature."

ERNST HAECKEL.

LONDON
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PREFACE.

It is allowed on all hands that fresh discoveries have to be made in the great field of Science: it is confessed indeed, that, notwithstanding the advances already made, much that is mysterious, and not a little that is contradictory, confront the puzzled inquirer. Discoveries, however, will be made—not probably through the medium of brighter intellects than those which have already been engaged in the pursuit, but mainly no doubt through the accumulated acquisitions, of which we in these latter days are the inheritors; for hereby enlarged scope will be afforded for philosophizing by means of the additional facts supplied. Yet the very plea that an Author comes forward pretending to disclose new truths is not unlikely to be received with some scepticism, if it does not create prejudice against his claims.

If I ask the reader to follow me in a track which can hardly be called “a beaten path,” at least as regards method, I trust I shall not lead him through a murky avenue, where twilight has scarcely dawned. The task, however, which I have undertaken, is not in itself an easy one, if it involves the

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pretence of safely pioneering a route through a *terra incognita*, in which others of far greater capacity have lost themselves.

I have to acknowledge many deficiencies in the production now issued, partly owing to the new ground which has been broken for the first time, partly to its brevity as a statement of principles, and partly to the fact that a remedy which might to some extent be applied, by re-writing the whole, short as the whole is, is beyond my physical achievement. But under any circumstances, I could not pretend to construct a pathway strewn with flowers, or indeed to make what might be termed "a royal road" into metaphysical *arcana*, which have been regarded by not a few as a hopeless attainment.

While, therefore, I invite a candid examination of the principles which I have propounded, I bespeak a charitable and forbearing consideration in respect of the defective execution of my work.

"Errors like straws upon the surface flow;
He who would seek for pearls must dive below."

The unexplored vista, which I here attempt to open up to my reader, is so unspeakably important, and on that ground ought to be so peculiarly interesting, that I trust my awkward use of the machinery employed to lift up the deep dark veil which shrouds the great

Unseen, will not be made matter of reproach, if even but a faint light is thrown on the spirit-region with which our world, and we who live therein, stand so intimately connected.

If I may be permitted to call attention to some of the specialties which characterise this publication, I would mention the following :—The inherent attributes of primitive and essential substance have been eviscerated; for substance without attributes is a contradiction in terms. The expressions, Spirit and Matter, have been respectively defined, while their consanguinity and connexion have been traced to what is obviously their natural source. The great bugbear of the age, that of materialism as itself the direct foundation of mind, has been relegated to its proper province. The precise source and foundation of physical Forces, and the laws whereby they have their play in the economy of nature, have been pointed to, as determined in circumstances consistent with universal experience. The basis of Life, that is of Natural Law in the vegetable and animal spheres, as well as in the mineral kingdom, has been duly manifested; and the great law of Causality, as an all-pervading principle in the wonderful chain of existing conditions, has been fairly analyzed and formally promulged.

Nor is this all. A scientific basis (as I must

regard it) has been found for a harmonious scheme of Mental Philosophy ; a definite foundation has been discovered for the Ego or Soul of man, as essentially a spirit-entity ; and not of man only, but of every animal creature—all in perfect analogy ; the range as well as the complexion of mental states being in all cases limited by the character of the cerebral organization, with which each is equipped ; and this, without the risk of sinking into the quagmire of materialism. The great doctrine of Realism has been established, according to the inevitable conviction of the common mind, in that a significant and unmistakable *nexus* has been ascertained as a go-between, to connect the material object externally, with the subjective mind internally. Moreover, the initiation of Will and its operations in all its phases, have been decyphered, and its freedom, as a movement of the Ego under the exercise of Judgment, has been, as I think, satisfactorily vindicated. The foundation of Morals also, as the magnificent prerogative of the rational mind, has been accounted for on grounds which will bear examination, and which show, what is a fact, that the law of Morals must as a necessity be always dependent for its soundness, on the extent and accuracy of the intelligence through which it is manifested.

I would farther call attention to the fresh representation of the Absolute, as the all-comprehending and fundamental Totality, which appears to me to be

logically reached, on the one hand as the final Ground or Quarry of existing beinghood ; and on the other hand, and in immediate connection therewith, as the intelligent Source from which all particulars have emanated. The Scheme of Psychology, moreover, which I have propounded, should, from its simplicity and harmony with facts, recommend it for acceptance, if it is free, as I think, from the contradictions and incongruities of prevailing systems, and will satisfy fair questioning as to the processes whereby accepted conclusions are fulfilled.

If I shall have contributed in some degree to throw down and to destroy what I must regard as one of the most complicated, and at the same time most mischievous structures ever built up by the perverted ingenuity of man—I mean the *a priori* schemes of Kantian and Hegelian transcendentalism, I shall rejoice ; for thereby philosophy will be freed from one terrible incubus, by which it has been too long enthralled.

Let me say, in conclusion, that one enormous advantage of obtaining a sound knowledge of our human mechanism, and of the relationship in which our souls stand to the external world, on the one hand, and its influences ; and to the Absolute on the other hand, as ministered through a Mediator, for the higher elevation of our souls, will more and more be appre-

hended, in that hereby we shall ascertain what constitutes the basis of sin, and the true idea of atonement, as the removal of sin. There are other theological questions such as the Divine decrees, and the grounds of human immortality, which will be found briefly referred to, as perfectly manageable topics on principles with which we are more or less familiar.

Perhaps I should have hesitated making such a recital as is contained in the foregoing statement, leaving the book simply to the judgment of critics. That under any circumstances must be the case; and I commit my thoughts to them for frank and fair consideration, as the thoughts of one who is not tied to the leading strings of any master, and who cares only for the achievement of truth.

THE AUTHOR.

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INTRODUCTION.

SECTION I.

AN INQUIRY INTO THE FINDINGS OF PRECEDING INVESTIGATORS.

THERE do not seem to have been many earnest or hopeful inquirers into the profound question of Ontology. The difficulty of obtaining an adequate idea of substance as such, seems to have repelled all procedure in this investigation. The reason of this is obvious. If we lay for ourselves a foundation which has no validity, the superstructure cannot stand; and the consequence is that we get confounded in mystery, and feel our incompetence. Sir William Hamilton complicates the subject by telling us that "whatever is thought, is thought under the attribute of existence;"* but then, in the very next breath, he gives forth the dictum that "existence is an *a priori* notion, native to the mind." He denies that the idea is elicited through experience;" and, on the plea (as he says) "that what suggests the notion of existence, is itself an object of

* I would ask what kind of an attribute is that of "existence"? Whatever exists must have some attribute whereby it can be known. If by existence he means "reality," I agree with him. Even a phantom, as such, though in the mind, must have existence, otherwise it no longer is. But can we call the mere fact of beinghood an attribute? What is an attribute? It is an endowment belonging to something having existence. Existence, therefore, is not an attribute, because mere existence predicates nothing respecting the thing existing.

consciousness."* "Where," he asks, "is the object of consciousness not already thought under the very attribute which this doctrine would maintain it originally to suggest?" Here lies the fundamental misconception of Hamilton, and the host of others who hold that there must be a pre-existent condition of mind, involving in itself a consciousness of existence, antecedent to the suggestion of any object *ab extra*. Accordingly he holds that "*ens* is to be viewed as a *primum cognitum*." And he goes on to assert that "we are conscious of the conditioned itself, only as not unconditionally conditioned; for, of the unconditioned, of the absolute or the infinite," he says, "we have no cognition, no conception, in a word, no consciousness." He says "this principle is valuable, as affording a *genesis of some of the most momentous*, and, at the same time, most contested phenomena of mind." And he goes on to say that "in the principle of the conditioned, two great principles, the law of substance and accident, and the law of cause and effect, find their origin and explanation. They are no longer to be regarded as ultimate data of intelligence: they appear now as merely particular cases, merely special applications of this higher principle. Take the former (he says) the law of substance. I am aware of a phenomenon, a phenomenon be it of mind or of matter: that is, I am aware of a certain relative,

* Can there be consciousness apart from an object of consciousness, and can there be an object of consciousness which is not elicited through experience? What he calls a *primum cognitum* is an *ultimum cognitum* derived from, and the necessary consequence of, our experience of the outward realities made known to us. (See following note.)

consequently a conditioned existence. This existence is only known and only knowable as in relation. Mind and matter exist for us only as they are known by us; and they are so known, only as they have certain qualities relative to certain faculties of knowledge in us; and we certain faculties of knowledge relative to certain qualities in them."* He asks "why am I constrained to suppose that this relativity is the known phenomenon of an unknown substance? Philosophers say it is an ultimate law of mind. I answer and say (he continues) it is a particular case of the general law, which bears that not only the unconditioned simply, but even the unconditioned of the conditioned is unthinkable.† Take an object (he says) strip it by abstraction of all its qualities, of all its phenomena, of all its relativities, reduce it to a mere unconditioned, irrelative, absolute entity, a mere substance, and now try to think this substance. You cannot. It cannot be thought except as a negation

* This is true so far as it goes. "We have knowledge of certain qualities, as these are conveyed to our understandings by means of the faculties or instrumentality given to us for that purpose. But this is not *primum cognitum* or first consciousness. The *first* consciousness is that of *self* as the object, or self-consciousness. The *secundum cognitum*, in the order of consciousness, is that of the external world. The *third* in the order of consciousness, comes through the internal senses. The *last* of all is the consciousness of *ens* as a *noumenon* or thing in itself, obtained through the relativity of a *constant* which is found to come into play in the production of all phenomena.

† Why is Sir William Hamilton's unconditioned "unthinkable?" The reason is because he strips it of all qualities; and it is impossible to think of a thing which has nothing whereby it can be characterized.

of the thinkable."* "Take now (he says) a quality or phenomenon. A phenomenon is a relative, ergo a conditioned, ergo a thinkable. But try to think this relative as absolutely relative, this conditioned as unconditionally conditioned—as a phenomenon and nothing more. You cannot; for either you do not realize it in thought at all, or you suppose it to be the phenomenon of something that does not appear. You give it a basis out of itself; you conceive it as the accident of a subject or substance."—*Hamilton's Edition of Reid's Works*, p. 935.

Such reasoning on the part of this gigantic metaphysician has frightened many investigators from tackling a subject so ticklish, or even questioning conclusions so decisively maintained; and, indeed, if we grant the premises on which he grounds his assertions, it is not easy to see how they can be controverted. But we do not grant his premises; on the contrary, we affirm that his premises have no foundation in fact. First of all, where have we any proof, or even the shadow of proof, that there is such a thing as a transcendental consciousness, that is an *a priori* consciousness prior to experience? In this assertion we have a begging of the whole question,

* Of course, if we take away all that belongs to an object, there is nothing left. We cannot strip away qualities and have substance left. There is no such thing as substance without quality. We may remove or take away the conditions of which quality is susceptible; but quality itself must remain as the very foundation of substance. Quality is the inseparable attribute of substance. This attribute as regards primitive substance may not be patent to our senses. Hence the phenomena which are cognizable by us are but the secondary or derivative qualities of which primordial quality is susceptible.

and a begging of it without the slightest real grounds in support of it. There is no such phenomenon as consciousness apart from the object of which there is the consciousness. There is the spirit-entity of course—the raw material, which has *the capacity* of consciousness; but, if there is no object submitted to it through agency, it has the consciousness of nothing, that is, it is without consciousness. True it is that apart from impressions communicated through the senses, there is fundamentally what is properly self-consciousness. But what is this primitive self-consciousness? It is neither more nor less than the consciousness of the bodily self, as will afterwards be shewn. Secondly, it is a grievous mistake, and a gratuitous assumption, to suppose that in this spirit-entity, which constitutes the foundation of our souls, there are any antecedent forms or conditions of thought; that is, so many special pigeon holes, as crannies or crevices wherein necessary truths are boxed up, and which, upon being stimulated, give forth ideas of time and space, ideas of causality, and other ideas of what is called "pure reason." The whole is a gigantic supposition which has deranged the investigations of mind, because it can be shewn that all necessary truths are but deductions from the current eventualities of our experience. The Ego (so called), as intrinsically conditioned with the primary attribute of a conscious capacity, is said, when conditioned forms are brought to it, to be conscious of these; and this, exactly according as they are received by the Ego. The forms and conditions are not antecedently in the Ego; but the Ego appropriates and lays up the forms and conditions of things as they

are imparted to it. There is, therefore, in the human mind, no antecedent knowledge of existence, apart from the facts of existence which are imparted to us in the course of our experience. Hamilton may tell us that we can only ascertain "the conditions of consciousness by its application;" but, we reply that the conditions of consciousness are neither more nor less than the consciousness we have of the conditions of things.

And now, with respect to the distinction which he introduces betwixt "substance and accident," he forgets to consider, or seems to overlook, what constitutes the absolute and inseparable attributes of substance, in that he supposes the possibility of substance without attributes, and then calls this "the unconditioned!" Substance without attributes (of which nothing can be predicated) is no longer substance. It is obvious that substance as such must be characterised by its own fundamental characteristics,—its intrinsic or essential attributes: otherwise how can there be such a thing as substance? He speaks of stripping an object by abstraction of all its qualities; but the idea is absurd. The moment we take away all its qualities we annihilate it. But absolute annihilation is impossible. There must be a foundation which cannot be destroyed. That foundation is substance in its absolute or primordial state; and the forms and conditions which are superinduced thereon are simply to be regarded as the accidents thereof. It is obvious these accidents cannot subsist by themselves; for they are the contingencies of which substance is susceptible. Substance as such fundamentally has its own generic attributes, which are inseparable from

substance as such, and it is the particulars of these generic attributes, which we find developed in the matter of the world of which we have experience, and of the relativity of which in connexion with primary substance we have constant and never ceasing experience. The idea of a naked *substratum*, apart from an absolutely qualitative basis, has nothing whatever to support it, but everything in reason to deny the possibility of this. With such a naked substratum, we are grounded at once in an Serbonian bog from which there is no escape. There can be no substance but as grounded in quality, and representing the potentiality of its respective conditions.*

And assuming (as we feel bound to do) that the ideas of things which we receive by means of our external senses are representations which convey to us a sense of their reality, our knowledge of external objects therefore constitutes of necessity a consciousness of their reality, as they outwardly exist,—a consciousness therefore of the existence of a material world. Here the question has arisen, — What is matter? and whence have we matter? We usually define matter to be—that condition of substance which is cognizable by means of the external senses, or still more profoundly, that condition of substance which admits of limitation. But this definition is not perfect in as far as we have good reason to suppose that what we call spirit-substance has its forms, and accordingly has its limitations. There are what we call matter-forms, and also what we regard as spirit-

* Of that substance we shall have occasion to treat hereafter, and in the Appendix I.

forms, and the distinction betwixt them must be regarded as that which pertains to the external modification of the conditions—that which marks the crass and tangible, as compared with that which is very refined, and beyond the range of sense. We discard then the doctrine of dualism,—the doctrine which implies the existence and subsistence of a twofold substance of independent character essentially and eternally. There is no such thing as two substances absolutely independent of one another: there is no experience whatever of such a phenomenon, and we shall come to shew that such a supposition is inconsistent with the close and intimate relation in which all the various characteristics of substance stand intimately associated and connected.

Since the days of Descartes, philosophers have been occupied with the idea of two independent substances, matter and mind, with a veering tendency towards materialism. The Positivist school have no doubt made psychology subsidiary to physiology, without, however, understanding in what way physiology paves the way for the territory of mind. This school repudiates all inquiry into causes. Stuart Mill, while holding to the doctrine of sensationalism, seeks to explain away the principle of causation into a combination of sensations. Herbert Spencer supplements Stuart Mill by his theory of evolution, yet without giving the slightest insight into the theory of causation. The new German psychology makes consciousness the result of the mechanical unification of sensations. Lange in his history of materialism seems at first sight an apologist of the materialistic philosophy; but it is not that materialism is to be

regarded as a philosophical explanation of things, but from the fact that the mind is thereby directed to the study of reality. Materialism in this view, he rightly says, has done eminent service. Matter itself he holds is in its essence emphatically *the inexplicable*. It has never arrived at the reality itself, but only at that relative reality which bears the impress of subjectivity. Hence, according to Lange, the necessity of being lifted to the ideal, to something *sui generis*, that does not belong to the phenomenal. "We are brought face to face with the *a priori*, not in the realm of intellect alone, but of religion also."

After the School which proscribes all inquiry into causes, and that which explains away the principle of causation, there is the critical School which distinguishes reason from the world of phenomena. The Kantian School has given most emphatic recognition to the element of *a priori*, which it has boldly placed above and beyond the world of phenomena. This latter is sacrificed to the pretensions of mind. This view seems to follow from Descartes' famous deduction, that the soul has essentially thought in opposition to matter; and in this he imagined lay the principle of causation. The ego not being regarded as the product of sensation is made itself to establish the reality of corporal existence; hence the untenable dualism between thought and matter. Descartes' famous maxim *cogito, ergo sum*, is thoroughly logical. But in connexion with the *cogito*, there has to be an analysis of the consciousness, and that analysis is made by inquiring, of what does the consciousness consist? Is there such a phenomenon as consciousness without an object? We answer assuredly not. To be conscious

of nothing is to be without consciousness. Hence consciousness implies the *subject* in which this feeling prevails, and the *object* given to it is that which occasions the feeling. Descartes made the object, synonymous with matter, and without considering how matter became an object of thought, he concluded that the soul was a thinking subject of itself, and quite different from matter as involving space.

Kant took up the question of soul as an independent thinking subject from Descartes, and proclaimed that thinking things could never occur among outward phenomena; yet that something underlies phenomena which so affects our sense as to furnish it with notions of space, matter, form, &c., which something he regarded as a noumenon or thing in itself. Kant said that we can never know things in themselves, because (as he mistakingly held) the mind comes between us and them. He held that substance and cause, like time and space, are purely subjective. He sets aside the Cartesian proofs of the existence of God, whether cosmological or ontological. The world does not enable us to arrive at any conclusions about its Author: and, as phenomena it is made the product of our own faculties. Instead of regarding the existence of nature as involving space and time, with him the science of nature was simply the application of outward things to the thought of space and time. Fichte refused to see anything but the Ego in the world, and projected all beinghood therefrom. Schelling upheld the idea of an objective, but was unable to distinguish between knowing and being, and somehow made the Ego the hidden forces from which everything emanated. He-

gel showed the Absolute as revealing itself in the reason, and worked up a logical concatenation of being accordingly. These various forms of substance have proceeded more or less from Kant, whose fundamental axiom was the subjectivity of pure reason. I ought to have taken into account the views of Spinoza, who like Kant may be said to be the offspring of Descartes, but in wholly different attitude. Spinoza entered into the question of substance more fully, and with greater originality than any philosopher before him. He defined substance as that which exists in itself, and is conceived by itself. He very properly regarded substance without attributes as a misnomer. If a thing is, he held that it must have some attribute whereby it can be known, and quite repudiated the term "unknowable existence" as a contradiction in terms. He had no proper idea of cause, but spoke of *causa sui*, which to us is self-contradictory. He defined God as a being absolutely infinite—that is substance consisting of infinite attributes; but he was unable to separate God from his works.

We ask now, what is the true solution of the great problem before us? Let us proceed upon acknowledged grounds. First, nobody doubts that he has received the impression (and hence the idea) of an external world of matter. Man has the consciousness of it. "There is no scepticism possible," as Hamilton says, "respecting the facts of consciousness." I hold an orange in my hand; its colour, figure, taste, smell, etc., are before the mind; still all lies in the act of consciousness; how am I to know that such impression and ideas are anything more than affections of the mind? I may appeal to what Dr. Reid termed

"rational principles of action," which may be regarded as intelligence in general, or what may be termed the harmony of thought, and the *reductio ad absurdum* in the conduct of life, if the reality of external objects is questioned; and hence the dismay, confusion, and distress that would ensue, and the violence done to moral principles. If Hume comes forward and still insists that this supposed reality of external objects is after all but a phantasm of the mind, and that we know not how such ideas may be generated in the mind, I ask farther, that the facts of consciousness may be fairly looked at. As we cannot deny the facts of consciousness without self-contradiction, so *neither can we deny the characteristics belonging to these facts*. Among these characteristics there is this one universally allowed, that the orange we hold in the hand stands *external* to us. This assurance of externality is a part of the fact, as determinate as the fact itself. We are fairly entitled then to take up the hypothesis of external matter when so assuredly suggested and presented to us, and we ask—can this hypothesis be sustained by circumstantial evidence? Supposing the orange to be a reality, having figure, colour, sapidity attached to it, can I find out any *nexus*, or *chain of connection*, between this supposed outward object and my mind sufficient to convey the idea of it thereto, as a reality of my consciousness? I reply that I do find this in the great fact, that, everywhere, and universally without exception, the *luminiferous Ether radiates or carries forth the forms and conditions of external objects from the objects to the external organ of perception*, or shall we say that the material object, whatever it is, expresses itself in the immaterial and

all pervading Ether, both in quality and in form, and therefore indicates the characteristics of the objects; in other words, intimates what they are; and that this very service, coming through the appointed nerve channel of the outward sense, operates as a message conveyed to the territory of cognition. The ascertainment of this fact satisfactorily answers every demand. We have but to find out how the whole man is structured, and how it comes to pass that mind is engendered, and how to account for the operation of mind in all its various departments of intellection and of volition in connection with, and in dependence on, material instrumentality; and how a spirit-homestead is hereby constructed, fitted for translation to a more refined sphere hereafter.*

If this claim which we make shall be found to be solidly and soundly substantiated—if the view we have sought to introduce respecting the ethereal medium shall be found on further investigation to bear out the prerogatives of primitive substance, and the attributes which we have assigned to it—if the structure of animal nature, and more especially of human nature, bodily and mentally, as hereafter set forth, be correctly described—if there be known no such economy as mind, apart from the body with which it stands connected, if the supposition of a pure reason in itself and by itself, apart from conditioned form, be one of the most groundless imaginings which ever took possession of human thought, if it constitutes a

* The fact of a proof being established for a connection betwixt the external object and the subjective intellect will form a foundation for our process of inquiry.

gratuitous foundation of mystery, which is not only unsupported by any evidence, but which leads to confusion and contradiction throughout in our inquiries into mental constitution, then it behoves that there must be an entire revisal in the method of our psychological pursuit. I have ventured into a groove of thought, which, as it appears to me, leads to a clear and harmonious interpretation of the phenomena of the world, and through these phenomena to the fundamental *entia* from which they are derived. As regards the execution of this task, I have but one desire, and that is to have the ability to re-write the whole from the beginning; but there are physical weaknesses which prevent this being done; and I commend my work, with all its defects, to the candid judgment of the intelligent. But I have yet, as introductory matter, to lay down the great principles on which my scheme is founded.

SECTION II.

A PROGRAMME OF PRINCIPLES, WHICH GO TO SATISFY, AND IN THEIR APPLICATION TO SOLVE, IMPORTANT PHYSICAL AND METAPHYSICAL PROBLEMS.

1.—*Absolute Substance.*

THAT there is fundamentally a Universal Substance which exists as an *ens* by itself, which is the absolute basis of all beinghood, which is uncreated, infinite, eternal, without parts, all pervading, unseen, that cannot be displaced, and withal impersonal; *generic*, moreover, *as to Quality*, and therefore having no particular condition in itself; yet having all possible qualities under one homogeneous unity, and, therefore, having the capacity of yielding up or supplying all possible definite or distinctive qualities, each of which may be drawn forth, when sample examples are prescribed for that purpose; and, further, also *generic as to Energy*, and therefore having no particular Force in itself, but having what constitutes the foundation of all possible forces under one homogeneous potentiality, and consequently the capacity of yielding or expressing all possible definite or determinate forces, according as these are generated under the agency of specific qualities in their respective conditions, that is, when the qualities are particularly conditioned and adjusted to one another, so as to introduce the operation of their affinity. We shall hereafter discover the fact of this universal and

immaterial substance in the Etherial medium by which we are environed, and with which we are coming to be more and more conversant; and we shall find it as the universally operative agency, explanatory of the phenomena of the world, in all the departments of nature.

2.—*Absolute Impersonality.*

That Absolute Impersonality is to be understood by the description of Absolute Substance, which we commonly designate Ether or the Etherial Medium, and which we must regard as being of the nature of Spirit, or what we may designate as *Pneum* or Spirit-substance, having the wonderful property of receiving and involving within itself any number of impressions which may in growth be developed into separate conditions; that said universal substance is properly to be regarded as Absolute Impersonality, and, therefore, an objective platform, constituting the foundation of all particular substances, as well as the primary substance out of which all particular substances are evolved; and looking to the fact that in its essential being as an absolute Unity, all particulars, as finite and specific qualities derived therefrom, must have a necessary affinity among one another, differing according to their conditions, and according to the laws of their combination—an affinity in virtue of which they are attracted to one another, or repelled from one another, according to the character of the existing conditions, and the relation in which they are made to stand to one another, we hence find that Energy being hereby particularized, we have the source

and spring of cosmical Forces, while we gather also that the forms and conditions that belong to a pure etherial or spirit-nature, may, by the application of an occult influence which we term temperature, be developed from the etherial into the material sphere, as an inspissation, or thickening of conditions; and, of course, as something cognate to our external senses, and through these made perceptible to our intellects; and further, we find as a fact in our experience, that all the existing qualities of matter in all their possible modifications or conditions are in universal sympathy with the primary mother-substance which constitutes the foundation of the Universe.

3.—*Absolute Personality.*

That there is an Absolute Personality as well as an Absolute Impersonality, and that the one is the complement of the other—the one being the primary Subjective with a manifestation of intrinsic conditions in distinctive action; the other being the primary Objective in their comprehensive oneness, the subjective and the objective being in eternal unison: the former being the Absolute Unity of all fundamental particulars in one Personality, the latter being the Absolute Unity of the same in their non-development, both being intrinsically one and the same substance, with this distinction, that the Personality is the sum of fundamental Qualities separately developed in the eternal activity of their full expression, while the Impersonality, in like manner, is the sum of fundamental Qualities in the fulness of their non-expression, or what may be called the capacity of their expression:

that while the former must be regarded as properly Deity, in being the absolute thinking and designing Source of all movement, and of all adjustment of relationships, the latter must be regarded as the necessary circumstantials of Deity, without which there could be no creation, and, indeed, no perfection either in Deity or in nature: that, therefore, it behoved that there must be in God as a Personality, those essential limitations of qualitative characteristics out of which all causality springs, and which are essential in order to the production of those limitations which are extracted from the Impersonal, and which constitute the works of Creation: that, as we shall hereafter find, there is in primitive substance, not only the qualitative attribute that admits particulars in the objective developments of substance, but that it is likewise lighted up as intelligence under consciousness, being the highest prerogative of which substance is susceptible, and which is developed only where personalities are constructed out of the fundamental Impersonality; that the primitive Personality, therefore, as having the highest form of manifestation, must be regarded as the Supreme Intelligence; and in his own Personality standing apart from all his works, and not to be confounded with his works further than as a manifestation of his skill and wisdom, his righteousness and goodness, his omniscience and omnipotence.

4.—*The Applications of Absolute Substance.*

That the essential nature of the Etherial medium properly regarded as absolute substance, and there-

fore existing in itself, is to be considered as peculiarly of the nature of spirit, by which we understand not only a tenuity that is all-pervading, and all-penetrating through the category of matter, but which, as we practically find, assumes to itself as spirit-substance, the forms and qualities which are derived from material conditions: that it is manifested in the departments of Electricity, Magnetism, Gravitation, Chemical and other affinities, and the Cosmical Forces generally:—that it has the capacity of taking on and setting forth in its own bosom what we may designate spirit copies of all material objects, and that by an endless elasticity peculiar to itself, it has the power of freely admitting any number of copies according to the number of material objects that happen to be present; and this separately, distinctively, and simultaneously in the same area, without collision and without confusion: that this power of representation is illustrated in the processes of growth, by reason of the forms and qualities that are found in and belong to the germs of plants, and which through the action of the etherial medium are made to bear upon the nutritive plasma, and so to introduce new forms, as the development of the plant brings these into manifestation; and thus not only growth, but variety of growth-forms is promoted, and in all cases in accordance with the germ that is present as a pattern. Farther, that the Ether, which we are inclined to designate as *Pneum* in order to intimate its spirit-nature and immediate applicability to a multitude of purposes, is the medium whereby Causality is made to operate, and its effects are made to appear as the manifestations of natural law, not only in cases where the causal elements are

in conjunction but where they are separated by long distances: that said medium is the causal *nexus* whereby external objects are conveyed to the eyes of the beholder, and thence by the optic nerve to the brain: that this medium acts as a solid in binding together distant orbs, as well as atoms of matter in dense masses, according to the strength of their affinity, while at the same time it is a fluid in which all objects live and move; that still further, it is without doubt the medium out of which all animal intelligence is derived, in that it is found to operate subjectively also in developing the highest attribute of its capacity, viz., Consciousness, according to the organization presented by the animal economy for the manifestation of this noble prerogative.

5.—*The Origin and Operation of Affinity through Absolute Substance.*

That we must regard the first and primary creations of the Divine Personality, as preliminary and preparatory particulars, in order to the building up of the universe,—that these primary creations are the primordial elements or specific qualities for forming the alphabet of an objective economy, that is, the a, b, c, out of which the book of the world is composed, and that these elements have, as already noticed, a necessary affinity to one another, being of necessity related to one another as members of a united family, and the offspring of the same mother-substance: that it behoved therefore that there should be a varied readiness of combination in these primary elements in accordance with their atomic values; and so combin-

ing, that they would be the molecules of composite substance, even as the junction of the alphabetical letters constitute syllables and words; and again, as words have to be joined to form sentences, and sentences to form the symbol of complex thought, so composite matter had to be combined, first in simply inorganic forms, preparatory to a more structural formation, known as cellular or organic, adapted in its combinations for vegetable and animal life:—that the idea of life, which has been regarded as in itself peculiarly mysterious, (for to life, which is an effect, has been mistakenly ascribed a formative and causative power in the mechanism and growth of plants, each after its kind) is neither more nor less than the normal activities of organic matter in following out the causality of those relations which are combined to constitute a definite individuality; and that growth is simply the conformation of the germ, operative through the all-pervading Ether on the plasma which supplies the required nutriment;—that the animal system is supplied with an economy of nerves of which vegetation is destitute, and that the nerve-economy serves to display the operation of bodily sensation as intimating the affecting of a different part, by the influence exerted on another, while its formation as a central organization of cerebral functions, arouses the highest prerogative of the Etherial self-hood, by developing consciousness, and through consciousness, the intelligence of our surroundings.

6.—*Causality through Absolute Substance.*

That the great question of Causality finds its

application and exposition throughout all the departments of nature as well as in the more mysterious categories of existence, by means of the self-existent Ether, as being the all connecting link whereby one material object is joined in sympathy with another, according to the several relationships in which they are made to stand to one another. What then are the principles of Causality as these are variously discovered in the relationship of cosmical objects? I answer they are found first and fundamentally in the respective *conditions* of the causal elements: Second, in the *relation* in which these are made to stand to one another as to the order of their combination. Upon these two considerations depends the Affinity that comes to be displayed, which is always subservient to the Relationship in which the conditioned objects happen to stand to one another. We have an illustration of Causality in the junction of the letters of the alphabet, each of these being regarded as conditioned objects. A certain junction of certain letters forms a word, as for example the word *note*: change the relationship of the letters, and we get the word *tone*: add an ingredient, for example the letter *s*, and we get *stone*, *seton*, *notes*, *tones*. Take again the words as conditioned objects and join them in varied relationship and we obtain sentences which have their respective and definite meaning as the effect. This holds good with respect to the material elements with which chemistry makes us familiar; and it will be found that the effect is found to depend first on the particular *conditions* assembled: second, on the *relation* in which they are made to stand to one another. Then we have the precise *affinity* displayed

in exact subserviency to this relation; and out of this affinity arises the resultant operation or the *Force*, along with the qualitative change produced. I would say the Affinity furnishes the Force, and the Relation prescribes and defines the law of the Force. Upon these principles we have the expression of all material law in the universe. But let it always be noted, that were it not for the fact that the conditions in their prescribed relationship are linked together by the all pervading nexus of the Etherial medium, there could be no natural function of matter with matter. And as Ether is essentially of the nature of spirit, it explains, also, as will be noticed, the connexion and causality of matter operating with mind.

7.—Other Capacities of Absolute Substance.

We have seen what absolute substance is in itself, as an homogeneous whole—as an objective Impersonality—as a generic in quality, having fundamental qualities, but without any expression of them by itself; we have seen also that there exists therein an expression of fundamental qualities, united in a primary Personality, being a vivid manifestation of all conditions that are contained *in gremio* of the other; we have seen that it behoves the principles of causality therefore to reside in this primary Personality, in as far as it is by the junction of one quality with another that there can be the production of a *tertium quid*; we have seen that it behoves that Supreme Intelligence must exist therein for the devising of new conditions in the processes of production; and that, when specific and specially conditioned objects are produced, there

is in absolute substance a response thereto ; and that absolute substance, in its generic character, is the common and exhaustless ground on which the first great Cause doth operate. What we are first and presently familiar with is the category of matter ; and matter is known to us under what are called non-metallic and metallic qualities, and found in these states as solid, liquid, and gaseous ; and farther, by the application of heat,* the solid may be reduced to a liquid, and the liquid to a gas, and the gas dispersed in atoms. Hence, much speculation on the theory of atoms, sometimes termed monads, some of which have been supposed to have subjective characteristics, and some to have objective characteristics, and by a process of natural selection thereby to begin a scheme of evolution of which no account has been given, or can be given, as a scheme of causality guided by Nature. We have seen that the process of first introducing certain particular substances must, according to the laws of causality, have had its source in a Supreme

* What heat is it is difficult to describe. It has been termed by Tyndall "a mode of motion ;" but motion in any mode whatever is not heat, but only a result of heat. We speak of temperature as marking the gradations of heat ; and we find that the conditions of matter are modified by the application of heat. As regards the sensation of it in the animal system, it may be pleasant to us or painful, according to the intensity with which it is applied : this arising no doubt from its action on the particles of the body. Heat differs from cold as only a gradation of temperature. Whatever we may describe heat or cold to be, we may say it is that peculiar influence whereby the conditions of the qualities of matter are altered ; and for aught we know it is that influence whereby the conditioned in spirit-substance is converted into matter-substance.

All-Conditioned One, to whom the foundation of particulars is to be traced ; and, that in their origination, the first formation of particular substance must be in spirit-substance only, and not as matter ; and hence the original conditioning of the qualities must have been in spirit-substance only. What we say then, in order to the production of material objects is this,—that spirit-forms are susceptible of being thickened ; in other words, that etherial conditions are capable of being incrassated. We find, as a fact, that there is a close sympathy betwixt the two.* We have seen that material conditions are everywhere invariably attended by corresponding spirit-forms and qualities in the etherial medium, extending according to a determinate law, under which the representation diminishes as the square of the distance from the object increases, and that the delineation of form and quality is carried throughout every part of this area, and therein also affinities operate. We find, moreover, that the forms and conditions of external things thus extended are conveyed to our external senses, and (as has been already noticed) by the nerves connected with these to the brain, where there is the *sensorium* or centre of nerve-transmission, at which the Etherial Me or Ego is posited. It is obvious that the foundation of this Ego, or what we may call the raw material of the Ego, is neither more nor less than the etherial representation of the bodily economy set up in the receptacle natural to it, and adjusted to be the recipient of impressions

* We have the spirit-forms rendered material forms ; and again material forms changed into spirit-forms in Scripture.—(See *Luke* xxiv. 31 ; *John* xx. 19).

coming in the character of ideas of external things as objects of consciousness ; and that under the peculiar circumstances in which it is operated upon, as bearing a reaction upon itself, as it were between body and body by means of afferent and efferent nerves, this Ego, already lighted up with a consciousness of self, becomes by further impressions through the senses lighted up with intelligence of the objects around us in the world.

8.—*Mental States.*

That the mental Ego is established as the ethereal representative of the animal body is demonstrated by a variety of evidence, the most important being the fact that the fundamental self-consciousness of the individual is a consciousness of its own bodily states and of these only, and that its tastes and tendencies are those of the body ; and also that there is a direct connection between the ethereal images objectively, and the same received subjectively as ideas ; that as images are formed in the spirit-substance in conformity to present material forms, so it behoves that a conscious state in the animal economy is not only excited, but must vary, according to the kind of organization whereby impressions are conveyed to the platform of spirit-substance, and hence the different mental constitutions attached to each separate animal economy, one rising in intelligence above another, according to the number and character of the inlets or organs for the introduction of ideas ; that man has a cerebral organization in analogy with that assigned to the lower animals, some of which in point of com-

plexity approach to the intricacies found in the human brain ; but it is obvious that there is in the organization of the human brain a special quality such as gives to man a range of intelligence to which there is no limit as compared with the lower animals, in that it enables him to embrace in his vision the relations of the *not-self*, as well as the relations of *self*. Animals see what relates to *self*, but man in cognizing the relations of *not-self*, is able to penetrate into the future and to prepare for the future ; and not only this, but to weigh character, to draw inferences, to fulfil purposes, and all this in subordination to the intuitions of duty and moral obligation.

9.—*Organization for Mental States.*

That the external senses are the instrumentality by which the mind is enabled to exercise the faculty of Perception, and that by Perception we have a cognition of the external world and its objects, and that these in their respective conditions are conveyed by the Ether to the eyes, and other senses, according as the qualities conveyed are adapted to them respectively ; and from the senses through the attached nerve to the brain : that the impressions received through the senses in the exercise of Perception, constitute the pabulum from which the internal senses derive their inner impressions, as these are registered in the cortical and cellular substance, and through which, as material to work upon, we have the facts of Memory, the pictures of Imagination, the creations of Conception, the conclusions of Reasoning, etc., all of which make up the sum of our

knowledge as the ideas come to and are appropriated by Intellect as its property : that the internal senses operate by means of a leading impression, drawing to it the required image by means of Affinity through Association ; and whatever be the nature of the impression, it is ever to be understood that the self-same quality with all its characteristics passes as ideas into the ethereal or spirit-ground of the Ego ; that the Ego as being fundamentally the ethereal or spirit representation of the bodily conditions, is in reality the Intellect or Soul, which admits any number or amount of involutions of separate data given to it, and preserves them intact as the furniture which it acquires, save when under the discipline of life, it has to yield up what it has been brought to repudiate as no longer its inherent property.

10.—*The Source of Emotions.*

That the inbringing of impressions (and these in the spirit-substance constitute ideas), creates emotions so soon as the ideas reach the Me ; and the emotions vary in character and kind according to the condition of the ideas on the one hand, and the condition for the time being of the Me on the other hand : that emotions are sensations which equally affect the body and the mind, but the mind through the impress on the body ; and this because the *idea* is but a spirit representation of the *impression* which is founded in the material organ ; and the emotion is felt to be mild or vivid, weak or strong, according to the qualities that are hereby brought into combination. Tell a man that some one, of whom he knows nothing, has

been drowned, he is but little affected ; but let him know that the drowned man is his father, and you immediately create a strong emotion by the very change of the idea as one affecting himself. That the Emotion according to its character may be attended by the immediate exercise of Will is obvious in very many cases. If meat is set before a hungry man, the Emotion at once carries with it the Will to partake of it. A counteractive emotion may however be aroused in the very act of partaking, *i.e.* if the idea should be introduced into the mind, that there is poison or some deleterious mixture in the food. A similar counteraction might also be manifested by the introduction of a moral idea, as when the military officer on putting a glass of water to his parched lips, on seeing a wounded soldier looking wistfully at him with craving eye, withdrew it and gave it to the man, saying "thy need is greater than mine." It is obvious then that the *ought not* introduced by the moral idea, may be sufficient to restrain the operation of the sensuous Will.

11.—*The Source of Morals.*

That moral ideas create moral emotions, and are those which interfere with or affect the rights of the sentient creature ; and that these ideas are found to arise at the very back of the sensuous Will ; and that they exercise a controlling influence in either arresting or permitting the operation of the sensuous Will, as when the idea intervenes that the accomplishment of the sensuous Will, may be an injury or not to another : that moral ideas are also presented when

we see a creature in pain from which he can be relieved, or in any need whereby he can be properly benefited, in which case an emotion is aroused which constitutes a Will to supply the want. This emotion as a rule will be greatly modified, *i.e.* heightened or lessened accordingly to the relation in which the party in want may happen to stand to the Me as feeling the emotion.

12.—*The Modifications of Will.*

While moral ideas influence the Me, by introducing the *ought* or the *ought not*, as the case may be, anent the exercise of the sensuous Will, there are ideas or sentiments which come to us as having a peculiarly *authoritative* aspect, ideas for example, which are believed to come from Deity, or which, according to the education we have received, stand in our minds as sentiments which are not to be controverted. Such ideas will be found to influence and engender Will, even when moral law, if left to itself, would otherwise prevail. We can hereby explain such cases as the sacrificing of children to Moloch by their parents. It is thus made obvious that the law of morals can be and is modified in character and action according to the views of authority under which the mind is placed.

13.—*The Principles of Will-Determination.*

That, in the exercise of Will, there is very often an alternative placed before the Me (the mind), as when two or three separate ideas seem to contend for appropriation in the fulfilment of a purpose, and one

of them only can be adopted: it may be illustrated by the fact of several candidates coming forward to fill an appointment, and one only can be chosen: it has been asked what moves the Will in these circumstances? I answer—In these circumstances *the Will must await upon Judgment. Judgment prescribes which of the ideas are on the whole the fittest or most desirable to the Me.* The Me becomes then changed in its relation to the claimants generally, and through the exercise of Judgment it is drawn to its choice by the Judgment. This sets forth clearly enough what is called *the determination of the Will.* It is the determination which constitutes the Will; and the determination is simply the preferential attraction which the Me has for one of the pleas rather than the other, *after Judgment has decided on their merits.*

14.—*Freedom of Will.*

That in all cases where there is the freedom of choice, there may very likely be a bias or predisposition leaning in some particular direction; but this fact does not touch the question of one's individual liberty. For what is really meant by the power of choice? Is it not the power of following one's own inclination, or at all events of serving some purpose? If I have a proclivity or bias in any particular direction, or if I have an end to accomplish, surely my liberty consists in adopting that direction in preference to any other; and when I have in Judgment weighed all the consequences of so doing, and decided upon the course I have resolved to follow, I am responsible accordingly.

N.B.—In close connexion with the universal principle of Causality, there stands forth the all-important question of Evolution. Since the foregoing principles were penned, I have read the latest publication on this subject, viz. :—Drummond's "Ascent of Man." It does not fall to me to express an opinion on the merits of this work ; but I take the freedom of saying, that his plea of "altruism," as a struggle for others in the field of nature, is not well founded. True it is that, in the animal economy, we see this instinct well established, particularly in mothers, in behalf of their young, while the young are dependent on their help ; but so soon as the young are able to provide for themselves, all care and concern for their offspring cease. We say, therefore, the instinct is a wise provision for the preservation of life while in a state of helplessness ; but this case of parents nursing their young cannot properly be regarded as at all a question of Evolution, but is an implanted instinct. We aver that until moral law comes into play, as in the case of man, we see very little of altruistic struggles for others in the world. And even then the selfish element has for the most part reigned paramount, as seen in the destructive wars which have ever prevailed. Until Christianity came, altruism has been at a discount ; and even yet we see what a vigorous battle it has to fight before the struggle in behalf of others comes to prevail.

True it is that we see the great principle of self-sacrifice in nature ; and Mr. Drummond makes much of this in corroboration of his altruistic claims. But though one department of nature is found to be made available by sacrifice for the maintenance of another

and a higher department, what lesson does it teach ; certainly not the fact of Evolution. It teaches the wise provision of an omniscient mind in ordaining that the lower stages of being should give way for the support of the higher. But until we have seen this law of altruism enforced in the person of Jesus Christ, viz., love to our neighbour, as the great principle of Christianity, we can hardly call the self-sacrifice of nature by the name of altruism.

Mr. D. rightly regards Love as the perfection of altruism ; but he has a curious notion of the origin and characteristics of love. "Love is love (he says) and has always been love, and has never been anything lower. Whence (he asks) came it? Who bestowed it? a little child. Till this appeared, Mary's affection was non-existent ; woman's was frozen." Surely everybody knows that love, like every other affection of the mind, is produced by the *presentation of something which is agreeable to the mind and heart*. As a general rule love is an attachment to what is gratifying to us. This attachment of course varies according to the category of the object which excites it. There is the love of money, the love of children, the love of truth, and the love of God, as the highest of all.

The principles of Evolution contended for by Mr. Drummond cannot I think be upheld. They wildly contradict all the laws of causality, in that they leap from species to species, without any real foundation for the results attained. We have been accustomed to believe that whatever is contained in the effect is to be found in the cause ; but Mr. Drummond's effects under evolution contain much for which there is *no* cause

whatever. I need but mention the conversion of the gills of the fish, which have no connexion whatever with *hearing*, and no adaptation for the sense of hearing, into ears, with their varied nerve organization for hearing, when the fish become a *land* animal! The whole is a burlesque on natural law. That there is such a principle as evolution cannot for a moment be questioned; but evolution has not only its limits but its laws; and for every expression of it there must be a satisfactory reason found; and in every expression of it also, there must be a preservation of what may be termed the *ground-form* of the structure; that form which may be regarded as the basis of species.

In behalf of an absolute evolution, it has been maintained that a single cell might be made to involve a very large number of separate characteristics. This is true, as we find in the case of the human germ and of others. But granting this, we are bound to assume the special interposition of a Creator of the germ in each distinctive stage of species; for before man came, it behoved that there should be complete development in each separate case of the respective seeds of animal creaturehood.* And then, if there is

* It is affirmed that the human cell, in its development, goes through the range of animal production, in its ascent, till its final stage of ascent in man. The fact of a single cell embodying such an enormous amount of separate fundamentals for the development of the extraordinary multiplicity that is known to exist in the organization of man, is one of the wonders that confronts us; and it opens up to us this consideration, that as the etherial arena or spirit-substance is known to embrace in its bosom any number of separate impressions without in any way confounding them, so it would seem that a vast number of

a gradual ascent till we come to man, as must be allowed, how are we to account for the expressive variety of collateral types, each having its own evolutionary changes? Nature in her ever-varying moods, according to the influences that happen to prevail through climate, food, training, etc., can after all introduce nothing that is absolutely new. We may have members strengthened by exercise, or members weakened by want of this, or even lost by the want of it; and we may have many changes by evolution in what constitutes the conditions of things; but that natural law should of itself invent *de novo*, or create a fresh organization, either by natural selection or by any other process, without the interposition of a constructive hand, is not only contrary to all analogy, but is inconceivable on the known principles of Causality.

these may be infolded in the smallest space, and presented under a material form. In these circumstances, it is most natural to think that, in creating the germs for future development, the Creator began with the simplest, and in each succeeding case imparted what constitutes the basis of additional structures, without increasing the size of the cell, when made capable of further development.

CHAPTER I.

THE PROBLEM OF EXISTENCE.

Section 1.—Characteristics of Matter and of Ether and the Cosmical Forces.

THE problem of Existence, or the great question of Ontology, involves the philosophy of substance. Great minds have addressed themselves to the solution of this problem, and have given it up in despair. Will any succeeding inquirers be more fortunate? It is not likely that better brains intrinsically can or will be applied to the investigation; and yet in the advance of scientific attainment, an inferior mind, placed on a higher pedestal, may be able to grasp a fresh peg whereby he can lift himself to still further views, and thereby be led to make additional headway into the inner secrets of essential beinghood.

We are familiar with the outside world of matter; and we have pursued endless speculations on the inside world of mind; but how to connect these two great categories, has baffled our philosophers. That there is a connection betwixt them, and this of the most intimate nature, is an assured fact to every man; yet the *modus operandi* of body upon mind, and of mind upon body, remains to this day a mystery. We are accustomed, and I think rightly, to regard the

essential basis of mind to be what we call *Spirit-substance*,* and for the very good reason that while matter is finite and limited in its qualities, and quickly loses its identity by the changes which are wrought upon it: mind has the capacity of receiving endless accessions, and with them all can, through memory, point to its identity, by bringing up past experiences in their separate occurrences. I may be assured that the tree in my garden is the growth of the very plant which I inserted in the ground twenty years ago; but there is no outward sameness now betwixt the original plant and the tree as it presently stands; but that I am *now* the individual I was *then*, is, notwithstanding all the changes I have undergone, an assurance of which I have no doubt whatever, because I can recall the facts and the very state of mind which existed at the date in question.

The fact then that I can trace backward a long series of identities that have been mine, and still are mine, constitutes a feature in the category of mind, which assuredly does not belong to matter as we ordinarily perceive it. The fact, moreover, that mind can hold in its grasp a multitude of items called ideas, without confusion, without collision, and without

* There are some who think that the term "substance" cannot be employed or embraced in the term "spirit," which is usually understood as an abstract characteristic, such as courage, vigour, &c., in the matter of disposition or temper. But what is this but the pith or marrow of the substance, and the term spirit may be used not only as denoting the *character* of the substance, but as meaning the substance itself, as something particularly refined and subtle, with energy and resilience for its attributes.

amalgamation, constitute qualities which cannot be predicated of matter; while the attribute of consciousness has no manifestation whatever in the arena of matter as such. We have good grounds then for concluding, that the basis of mind must be regarded as spirit-substance.

Here inquirers have been led to stop short; and they have hence concluded that spirit-substance must be regarded as exclusively "mind-stuff," and therefore not to be sought for in the category of mere physics. Physical philosophers in this respect have sadly overlooked the great fact, that spirit-substance may be found operating (and in contrary directions at the same time)* in the field of pure-matter. We are acquainted with the great forces which constantly play their parts in fulfilling the phenomena of the world, and with the ultimate common ground in which they all rest. We are indebted to Sir George Grove for the assurance that Electricity and Magnetism, Chemical and Electric Affinity and Gravitation are not only convertible into one another; but that for this very reason, these forces are but different affections of one and the same invisible medium. Physical philosophers indeed are fully cognisant of this medium which is known by the name of *Ether*; but though they speak of it as "a highly elastic

* Hence the doctrine which has prevailed among philosophers, and is still believed in by many, of two fluids (positive and negative); but two fluids in point of fact would not suffice; for it can be proved that a score of different lines of action may be found operating in the same plane, that is in the same local compartment, and in all possible directions without interruption.

medium," they have been unwilling to regard it as in itself other than matter; and even to speak of its atomic character, though they nevertheless find that "nature abhors a vacuum."* If it were a

* Sir William Thomson asks the question "What is Ether?" and answers, "It is matter prodigiously less dense than air—millions and millions and millions of times less dense than air. We can form some sort of idea of its limitations. We believe it is a real thing, with great rigidity in comparison with its density; it may be made to vibrate 400 million million times per second, and yet be of such density as not to produce the slightest resistance to any body going through it."—(*Constitution of Matter*, p. 347.) Tyndall says "Space is occupied by a substance almost infinitely elastic, through which the pulses of light make their way." And he goes on to say—"it is just as easy to conceive of a vibrating atom, as to conceive of a vibrating cannon ball; and there is no more difficulty of conceiving this Ether, as it is called, which fills space, than in imagining all space to be filled with jelly. You can imagine the atoms vibrating, and their vibrations communicated to Ether in which they swing, to be propagated through it in waves. These waves enter the pupil, cross the ball of the eye, and break upon the retina at the back of the eye. Their motions are communicated to the retina, transmitted thence along the optic nerve to the brain, and then announce themselves to consciousness as sight." (*Lectures on Heat*, p. 250.) Sir J. Herschel on the undulating theory, says "an excessively rare, subtle, and elastic medium, or Ether, fills all space, and pervades all material bodies, occupying the intervals between their molecules; and that the molecules of Ether are susceptible of being set in motion by the agitation of the particles of ponderable matter." Faraday says—"I suppose we may compare the matter of Ether and ordinary matter, and consider them in their essential constitution, either or both composed of little nuclei considered in the abstract as matter, and as force or power, associated with these nuclei; or else as both consisting of mere centres of force, according to Boscovitch's theory." It is very obvious that the view of Ether given

medium composed of atoms, then assuredly the atoms, as finite particles, could be displaced; but there is no such thing as displacement for a moment, or by the thousandth part of a hair's breadth of the Etherial medium: it must be regarded, as we shall see, as an endless continuity, or absolute uniformity, without the possibility of a break therein. Hence it has been compared to a compact jelly, or being one continued persistent unity. And moreover its elasticity is such that however occupied in connexion with any representation, or set of representations, it has always a fresh side for the representation of additional objects that may be brought into the arena of manifestation.

by these distinguished authors begs a condition of this primitive substance very different from that set forth in the text, and very unphilosophical, because it is found to be in many respects unlike to matter, and because it fails to account for the present condition of things on any feasible principles. The authors of "The Unseen Universe" (p. 148) say—"the principal properties of Ether are at first sight at least of an incongruous character; for from one point of view, it appears as a fluid, from another as an elastic solid. There is no appreciable resistance offered by Ether to planetary motions even when the velocity, as in the case of the earth is 100,000 feet per second. On the other hand, light transmitted with a velocity 188,000 miles per second, depends upon transverse disturbances of some kind, while several optical phenomena indicate a velocity almost infinitely great, in comparison with this enormous velocity. Regard the Ether as we please, there can be no doubt that its properties are of a much higher order in the arcana of nature than those of tangible matter; for we know from what it does that it is capable of vastly more than any one has yet ventured to guess." See *this subject (Ether)* further discussed in *Appendix I.*

And here it is needful to point to the first and most important office accomplished by Ether. Obviously it is not intercepted by matter-substance. This is made known to us by the fact that in day-light it readily passes through transparent matter such as glass; and not only so, but by the fact that it carries with it the forms of which it happens to be the bearer. And this opens up one of the most important features of this remarkable medium, which is this:—that the matter of outward objects is not only penetrable by, and pervious to the Ether, but that from the material object there is projected a corresponding etherial representation or form, etherially bearing the qualitative properties of the object; and extending by a certain definite and determinate law, according to its mass, while decreasing inversely as the square of the distance increases. This great law—the Etherial projection of the material object—has not been taken into account by our physical philosophers, as it ought to have been. But it is in the first place proved to be a fact; and in the second place it is found to explain the whole phenomena of nature, which stand before us as facts which are otherwise utterly mysterious—facts which are patent to us, but of which we can ordinarily give no explanation.

As to the fact that the representation of the material object is projected or radiated over the plane of the object: this is made known to us by holding up a mirror before the object. Hereby it is shewn as decreasing in size inversely as is the square of the distance of the mirror from the object; and here also, is a remarkable fact that the whole surrounding medium in every part takes on the

image—not by threads, but by continuity. And accordingly, we find that in day-light the objects of the outer world are depicted on our eyes, as so many mirrors receiving the images of them. And in their case the image is carried by the optic nerve to the brain, where, as we shall afterwards see, there is a reception of them, and consequently a cognition and consciousness of them, by the mind.

But we have reason to know that it is not merely in the luminiferous condition of the Ether that there is a radiation of the material object, but at all times, in the darkness as well as in the light. It is thereby that heat is radiated ; and it is thereby that the formless protoplast takes on the characteristics of the existing germ-forms, whereby growth is promoted. In the merely physical economy we can produce the representation of an object, as by electrical agency, in a plasma adapted for receiving it. And it seems natural enough to suppose that, if the etherial medium, as the most fundamental and the most all-penetrating medium in existence, takes on the speciality of the form and character of an object, the plastic medium, which is provided as a material basis, through the action of the etherial medium, takes on the same form and characteristics as that belonging to the germ.*

* It may be regarded as still a mystery in the process of growth, how to account for the new developments of blossom and of fruit, with all the many specialities of form and quality displayed in the world of vegetation ; and for the variety of organs and filaments that are manifested in the animal body as it comes to maturity, none of which can be detected in the germ or seed from which all is developed. Here we are initiated into

This leads us to speak of the Forces of nature generally. We have become familiar enough with the phenomena of Electricity, and more particularly with its use in telegraphy. We ask—what is telegraphy ? The answer is—it is the transmission of material conditions, or shall we not rather say, of *the representation of material conditions*, through a medium found adapted for this end. What are material conditions ? I answer, such as are manifest to our senses—they are forms which can be seen by the eyes, or heard by the ears, or felt by the hands ; or they are savours ascertained by the taste, or odours made known by means of the nostrils ; there are also physiological conditions which are determined only by their chemical constitution. What is here affirmed is, that all those conditions of matter seem to plant their essential qualities in the surrounding etherial medium, and therefore they exert their affinities in the etherial medium as effectually as when we see these affinities fulfilled before our eyes in the sphere of matter.

In this view we come to have a fresh aspect as to the foundations of matter. The difference betwixt spirit-formations and matter-formations appears to be this, that by some process (we may call it *attenuating*) a change of thickening takes place, whereby the *spirit-form*, which of course is finite, comes to be represented

the wonderful capacities of substance, which is not only able to bear within the bosom of the germ the initiatory form of body in its more immediate development, but those posterior impressions which shew themselves at the back of certain expansions. It would seem that the enormous number of involvements which spirit-substance may embrace in the smallest compass may be folded up in matter.

as a *matter-form*. In both cases there is the finite constitution made up of its respective qualities, the material representation being simply a grosser manifestation of the more refined delineation in Ether that is unseen.* Of these refined delineations in the spirit world, we must distinguish those which are fixed and determinate, as having their natural sphere therein, from those which are temporary, as being the evanescent shadows of material objects reflected therein, and dependent on the presence of the material objects.

We see, however, the value and importance of these shadows, in as far as the forces of nature are carried on thereby. For example, the ethereal representation of the sun meets the ethereal representation of the earth, and that of the other planets of our solar system, and thereby maintaining the centripetal relation of each to the sun, while their movement given to each centrifugally balances this relation into a definite circumambience; and again, the great mass of our earth attracts to its surface the material objects which are separated from its own compact body, thereby constituting what is called gravitation. In other words, the maxim holds good universally that whatever happens to be the affinity of the substances which constitutes the globes of space, that same affinity is

* What are we to understand as to those appearances of angels, as beings belonging to the spirit-world, whom the Scriptures represent as at times appearing in material forms? What but to suppose the possibility of their spirit-forms being manifested in the garb of matter. What also, about the spirit-form of the Lord Jesus Christ after his resurrection, which was yet made to put on the material form and handled as such by his disciples?

expressed by the interplanetary ether, and through this reacts on the material objects themselves.*

Section 2.—The Cosmical Forces dependent for their characteristics on the Affinity of the Conditions brought into operative relationship.

I have said that the Ether penetrates material substances, and in so doing according to its universal law, it partakes of the quality and therefore the affinity which the particles of matter have for one another; and it confirms that affinity, according as it is strong or weak. Hence the tenacity with which the particles of the diamond cleave to one another, while that of ice, water, and steam are quite different. This constitution of matter moreover explains what may be called the transmissibility of force through any material medium. The particles may be so loosely joined that the body of matter is thereby less fitly adapted for an electric current; or they may be so compactly joined as to be little susceptible of motion; or they may be constitutionally unfitted for receiving impressions, and therefore to be regarded as bad conductors so called. We find the required quality and consistency in the particles of a copper wire which carry out the impressions imported. And as confirmatory of the doctrine that the junction of distinctive qualities lies at the foundation of force, and that forms which

* Here it is obvious that the Ether manifests itself as at once a solid and a fluid. It behaves in the character of a solid when it grips the heavenly bodies together, as if in one mass, and at the same time as a fluid, when it permits their respective movements within its bosom.

may be conjoined with the force, when not violent, are conveyed through a suitable medium, we find not only certain configurations, but the very sound, as the quality whereby these configurations are accompanied, can be conveyed, and may be detailed, if there be but a proper receptacle for the reception of the same at the opposite terminal.

The force here spoken of is commonly called by the name of Electricity. But Electricity opens up to us another force which is created thereby, viz., the force of Magnetism. Electricity during the process of its operation creates what has been called a *transverse position of the particles of matter* to one another; and this it is found changes their affinity in a transverse direction. This transverse direction of the particles creates what is called the magnetic force, of which the ethereal medium is partaker; and when this transverse attitude of the particles becomes static, we have what is called a magnet. The power of a magnet is seen in the particular polaric attraction which is hereby constituted. It is particularly illustrated by placing a magnet into a bag of nails, when as exemplifying the magnet influencing the ether, and the ether the nails, the nails with their polarity hereby changed, are found not only to cleave to the magnet but to one another. And what is the explanation of all this? It is simply this, that the ethereal condition created in the ether by the vicinity of the magnet, communicates itself to the particles of the nails according to the law of inverse distances. And here we could have no better example of matter having its condition represented, first in the spirit-substance, which everywhere envelopes matter, and by means of the spirit-substance

again carrying this condition into other matter, so as to condition it accordingly.

The force known as Elective Affinity, and indeed all other affinities, are explained upon the self same principles. Each substance has, of course, its own special qualities, and whatever these may be, they are projected in the universal medium of ether as spirit-substance, according to the law of inverse proportions, and therefore when two substances, having an attraction for one another come within the sphere of their mutual range, they are drawn towards one another by means of the interposing conditioned ether. This may be seen by placing two corks floating in a basin of water. Placed at a certain contiguity, they will be gradually drawn to each other, and as they approach nearer they will rapidly run together, thereby showing that the spirit-medium is the operative agent as having its initiative from the material substances themselves.

We come then to understand that, in the first place there is a universal spirit-medium, which we call by the name of Ether—that all matter of necessity subsists therein, and gives forth its qualities thereto, thereby constituting a spirit-form, as the efflux of the material form; and that in virtue of the kind of conditions imparted, and the circumstances attending it, so will be the forms attending the operation of these forces. In this way we come to explain, as already noticed, what has been regarded as a profound mystery, the operation of growth, where there is the formation of special lineaments in the prepared protoplasm, according to the fashion of the germ, as the type in question of which growth is constituted.*

* Tyndall shows clearly that crystals are built by the *play of polar force* (see his *Lectures on Sight*, pp. 101, 259, &c.) In

Section 3.—The Origin of Affinities.

Having then so far ascertained under what circumstances the forces of nature in the physical economy have their operation, and each with its own peculiar characteristics—having ascertained moreover that the laws of Affinity in material objects are imparted to the spirit-form in the medium surrounding these objects, and that corresponding operations ensue, we come to the consideration of the still deeper questions, whence come the Affinities which in the states of attraction or repulsion, characterize the different kinds of matter; and whence comes the Energy which gives rise to various kinds of Forces with which we are cognisant?* It is a remarkable

his Fragments of Science, p. 86, he asks "What is the vegetable world itself but the result of the complex play of these molecular forces? Here, as elsewhere throughout nature, if matter moves, it is force that moves it, and if a certain structure (vegetable or mineral) is produced, it is through the operation of the forces exerted between the atoms and the molecules. In vegetable as well as mineral forms are the final expression of this complicated molecular action." Tyndall saw the great fact of their operation in the question of growth; but he has failed to point out what constitutes the guiding rule in each separate case.

* In one of the very latest publications which has to deal with the Forces of Nature, we have the following:—"In reality neither here nor anywhere else, have we any knowledge whatever of what is actually meant by attraction: nor in the one sphere nor in the other, have we seen the means of approximating to such knowledge. To Newton himself, the very conception of one atom or one mass attracting through empty space another atom, or another mass, put his mental powers to

fact that, whatever happens to be the kind of matter in the universe, the etherial medium sympathizes therewith: there is no exception to this law; and here we fairly infer that there is, and must be, an *intrinsic connexion* betwixt the matter of the universe in all its states, and the etherial medium, as the universal substance throughout all space. We inquire what is the source and nature of that connexion; in other words, whence come the affinities that exist in the varied matter of the universe? This is a question that can be answered in such a way as first to account for the facts of affinity, and second to explain the facts as they present themselves.

I have laid it down that first and fundamentally, there is but one absolute substance—that said absolute substance exists under two distinct categories, depicted as positive and negative—that the *positive department* sets forth the absolute expression of fundamental Form, or what we may term plenary and primary Individuality, as the source out of which all secondary or derived individuality can proceed, and that the *negative department* sets forth the platform whereon all derived individuality can alone have its

confusion. And as to the term Affinity, the most recent chemistry finding it utterly unfathomable in itself, confines its researches at present to the investigation of its mode of action. Science does not know indeed what forces are: it only classifies them here as in every deep recess of physical nature, we are in the presence of that which is not physical. That which bars the way imperiously at every turn to a materialistic interpretation of the world."—(*Drummond's Ascent of Man*, p. 433). The author of the present little treatise humbly hopes that the door may be by and by opened which shall conduct to a fresh illumination of the dark passages which conceal nature's secrets.

validity established, the difference between the two being that the one is the *self-existing Source* of all positive conditions having causality in Himself; and that the other is the *self-existing Ground* in which fresh conditions are impressed: the former being the primordial *Conditioned* in its essential manifestation and unity, with its endless scope for manipulation: the latter being the primordial *Unconditioned*, with endless capacity for receiving and displaying conditions, the former being *Personality* in its necessary existence, and the latter being *Impersonality* in its necessary existence. It is obvious that without both there could be no such thing as the origination and the propagation of positive beinghood. I shall have something further to say about the primitive *personal* substance; but in the meantime, I call attention to the primitive *impersonal* substance.

Primitive or primordial substance in its impersonality is regarded as one and infinite throughout, without parts, without atoms, a continued uniformity, embracing in its bosom the capacity of allness of qualities with its conditions, in some such fashion as day-light embraces all the colours, though it has none of its own, and with the capacity of manifesting all positive conditions when a pattern is exhibited. It may therefore be asked how the primitive forms of matter are deduced from homogenous substance? The only answer which can be given comes to be this, viz., the introduction of primitive and specially qualitative substances as originals: in which case they could be propagated to any extent. Hence, then, we readily can conceive under the production of finite qualities, not only the affinity of qualities as being all

derived from one and the same mother-substance, but likewise the multiplication of atoms, as the measure of their respective combination to form compressed qualities in the great spirit-medium. But how, it may be asked, do these become the foundations of *matter*? I have only one answer, and that is by the process of thickening. What is the key to this process we know not; but there can be given no other answer so far as appears. How the spirit-form is converted into a material form we have no means of showing further than this, that there is a process of incassation, probably by a depression of what we call temperature—we think this can hardly admit of doubt—a process whereby spirit-forms can be shown as material bodies.

But now, what we say is this, that the fact of all the varied qualities of substance being ultimately drawn from *one and the self same general mother-substance*,* it behoves that there must be an affinity of qualities among them, that is a near relationship of filiation, as being the offspring of one and the same parent. It is of enormous moment therefore, that, while we can point to the great facts of Affinity, we can also set forth the rationale of these facts. In other words, we can say why it is that certain ingredients exhibit an intense sympathy for alliance with one another, and why it is on a reversion of circumstances that certain others have an antipathy to one another. We can also show a reason why we

* I find that Brewster, in endeavouring to explain "the persistent activity" of light, remarks that "Ether itself may be a compound body, consisting of, or containing, all the elements of matter."

must regard the various qualities of derived substance as atomic in their constitution,* while pure Ether, as such, in its own essential and primordial condition is destitute of any such characteristic.

Section 4.—The Cosmical Forces dependant on Energy for their dynamic origin.

There is, also, another attribute of primitive Ether. There is not only the *Qualitative* attribute just referred to, out of which all special qualities of substance are drawn, but there is also, the *Dynamic* attribute known as Energy, out of which come all the particular Forces which are to be found in our experience. It is of great importance that we should understand under what circumstances the various Forces which exist in the world as forces have their outcome. Energy is

* The very fact of separation into determinate qualities implies the great fact of limitation. It is obvious therefore that Quantity is a dependent on Quality. And as regards the question of Quantity it is perhaps not easy to say where limitation ends. Sir Wm. Thomson (Lord Kelvin) says "it used to be a favourite subject for metaphysical argument amongst the scholars, whether matter is infinitely divisible, or whether space is infinitely divisible, which some maintained; while others maintained that matter only is not infinitely divisible, and demonstrated that there is nothing inconceivable in the infinite sub-division of space." And he goes on to say that it is simply an inconceivable absurdity to suppose a limit to smallness whether of time or space; and here we find him lecturing on the millionth of a millimetre of Oxygen. (Lectures on the Construction of Matter, p. 151). Practically there is no such division; but it is demonstrated that Ether can hold no end of separate elements in the same area.

the foundation of them all.* The particular affinity manifested by the quality or qualities of substances in each special case exemplifies its own corresponding force. We have the force of Electricity dependent on the readiness with which a certain condition imposed on matter affects the matter adjacent to it; or rather the readiness wherewith the particles of matter (say in a copper wire) are affected by the key-note imparted at the terminus, and prescribed to and adopted by the Etherial medium. We have the force of Gunpowder

* It is obvious that Energy, being a fundamental attribute of primitive substance, is so to speak measured by the qualitative character given to created substance, when converted into Force. We speak of a conservation of energy and a dissipation of energy; and most unphilosophically, as if energy could either be increased or diminished. If we could rightly consider the matter, we would recognize that energy could not antecedently be measured, because its measurement is squared simply by the qualities of things existing and the relation in which these are made to stand to one another.

On this subject of Energy it is proper to take notice of "the kinetic theory of matter" as hitherto prevailing. It is painful to read the elaborate ingenuity of Sir Wm. Thomson and others in accounting for the operations of matter. He says, "if we could be perfectly satisfied with the kinetic theory of gases founded on the collisions of elastic solid molecules, there would still be beyond it a grander theory, which need not be considered a chimerical object of scientific ambition to explain the electricity of solids." He is in difficulty as to an explanation of "the properties of matter," and says "though this consummation may never be reached by man, the progress of science may be—I believe, step by step, will be—towards it, on many different roads, converging towards it on all sides." I have no hesitation in saying that the properties of matter are the specific qualities which are originated by Deity from the etherial substance, each of these qualities being modified by conditions which are the sub-

indicating the suddenness of the repulsion which takes place in its particles, by the change of condition which is effected by the application of fire. And so with respect to all other forces which arise naturally, according as one condition of matter is affected by another: the law being, that according to the prevailing affinity in the particles of matter, so is Energy displayed in the character of the Force attending these actions.

We shall have more to say respecting the attributes of Ether. Here it is necessary simply to call to mind the great fact that Energy is one of the inherent and inalienable attributes, and hence that wherever there is substance, there also there must be energy. In primitive or pure ether there can by itself be no force of any kind indicated, for the reason that the ether is absolutely *generic*, and perfectly balanced, having no particular bias in any one direction more than in another; and this from the fact that it has no express particular or particulars in regard to a qualitative cha-

qualities or accidents to which the category of any quality may be subjected; and while the more generic qualities have their necessary affinity, the conditions of these qualities which constitute particular modifications of these must of course alter the affinities accordingly. It is obvious that in these circumstances the affinities of gases, and the affinities of solid matter, must all be referred to the same general law of operation. But we do not believe in "elastic solid molecules," and Sir William (I mean Lord Kelvin) allows that the kinetic theory of gases is an unsolved problem (see his *Constitution of Matter—Lecture—Steps towards a Kinetic Constitution of Matter*). The whole problem of kinetics must be held to lie in the relationship in which the properties stand to one another, and out of that relationship therefore the exposition of kinetics is not to be found.

racter, the energy which is inherent has therefore no impulse to express itself one way or another. But the moment a special quality is introduced, the energy must give expression to the characteristic of that quality; and the atoms, of which the quality is composed, are held together by said energy; that is to say, the energy gives expression to the affinity whereby they are held together. And here, again, we find operation or force as the result of the inherent energy, when two substances (that is two distinctive qualities) are brought within the sphere of each others influence, then the affinity is found which gives specialty to the force, an affinity carried by ether from the material objects, which hereby affect each other by way of attraction. And what is the operation but a force, varying according to the mutual affection which belongs to the separate ingredients. And this display of force is illustrated in gravitation, in chemical affinity, in elective affinity, in electricity, in magnetism, in the growth of plants, and the like. Without energy there could be no force, and without quality there could be no particular force.

Section 5.—The last and highest attribute of Ether.

There is still another attribute of the Etherial substance to be considered, which has not heretofore been observed; but it is one of enormous moment, in as far as it not only explains what has hitherto been a very great mystery, and utterly baffling human sagacity, but one which applies throughout to the exposition of Mind in all its stages, in the animal world as well as in man. We have found Ether to be

first of all a non-material substance, yet in such a world as ours constantly engaged with material substance, supplying representatives of the conditions of material substance in all its qualities, save in the grossness or crassness which characterizes matter. We have moreover found Ether to be the *generic substance* which is at the foundation of all substances, and which comprehends within itself all the derived qualities of material substance, which we must regard as specialties which characterize material qualities, and that all of them are primarily derived from the primitive Ether, and this explains to us two important facts: first, the fact that *Ether sympathizes with all matter* of whatever sort, and secondly, the fact that *there is an Affinity betwixt the various qualities of matter* as linked together by Ether. And we have also found that besides a fundamentally *Qualitative character* out of which we have positive substance, Ether has also an essentially *Dynamic character* to which we give the name of Energy, out of which we have positive Force. Hence Forces cannot be illustrated but by the combined employment of both these; for whatever happens to be the qualitative characteristics of various kinds of matter, it is the same which manifests the kind of Affinity in matter, and which gives significance to Energy, and hence a special kind of force is expressed. Such are the attributes of Ether as displayed in the *physical* world.

I have just said we have still another attribute of Ether—an attribute which can have no manifestation in the merely physical world, but which shows itself abundantly in the animal world, where there is the establishment of a nervous system, and a centre of

brain-work for its operation. First of all, inquirers have been puzzled beyond *measure* and perplexed as to the source of *mental* states. They have obtained some knowledge of all objective substances, but they have not seen, nor otherwise known, any such phenomenon as Ether emitting consciousness: whence consciousness comes has been an utter mystery to man. It displays itself in one set of circumstances only, viz., in the animal frame, wherein there is the establishment of a nervous system. There is much, very very much, to lead us to believe that the operation of mind is neither more nor less than our old friend in a new position—the Ether, found as the spirit-medium in physics, and always working in and along with matter. In the first place we have the knowledge of this medium being constantly illustrated, and inexhaustively as spirit-substance in the world of matter; and what other medium can we conceive as spirit-substance operating with matter in the territory of the brain? In the second place, it is most natural to suppose that, as an offshoot from the nervous system, there must be an ethereal representation and concentration of the bodily frame inwardly; that is, it is in correspondence with all analogy that a radiated or projected representation of bodily states posited in Ether, at what we must call the central station, which spiritously denotes the *me*. Thirdly, we say—here is developed the new attribute of consciousness; and it is easy to understand how in these circumstances such an attribute should be brought into manifestation, which is impossible in the merely physical economy, on the ground of there being in that economy no subjective reaction. In subjective

reaction there arises the display of a conscious self-hood, which ensues from the fact that the etherial development of the bodily *me* is not lost in vacancy as in physics, but is reflected so to speak as its own self-hood, and hence the expression of its self-hood mentally is manifested therein. We are hereby enabled to say what are the very foundations of mind in the animal economy. The expansion of mind and its various faculties are of course necessarily dependent on the varied instrumentality by which mental states are revealed. But all this will be more particularly dwelt upon hereafter.

Section 6.—The Law by which Propagation is effected as compared with Creative effort.

In treating of the phenomena of substance, it has been noted that Quality and Form lie in two distinct categories. Quality we have seen is an indispensable essential of substance. If it were not so, if there were primarily a *substratum* without quality, or apart from quality, whence, we might fairly ask, is quality to be obtained? Could quality have any being apart from the substance in which it inheres? Substance then, as developed in some particular quality, is the basis on which Form hath its foundation. As quality may be indefinitely modified and varied in its conditions, so form may be endlessly changed in its configurations. Now, reverting to the fact, that the Conditions and Forms which constitute the characteristics of any material object, are radiated or projected therefrom in the etherial medium, according to a definite and intelligible law, we are in a position to

consider the all important problem which deals with the forms and conditions of objects, their propagation, their multiplication, and their diversification. We cannot look outward without seeing some illustration of the great facts which nature shews. The outward scene, as depicted on the eye proves it: the forms pictured on the mirror prove it: the photographic picture proves it: the forms that are constituted by the law of growth prove it: the messages through the telegraphic wire prove it: the changes created by magnetic influence prove it. Hence it is made apparent to us, that growth as a law of nature whereby plants are raised from seed is a very different thing from the primary initiation or introduction of new forms by the creating hand of a purposing Intelligence. The work of creation is the special conception of a rational mind, which devises an object with its separate characteristics in harmonious adaptation to one another, and all as a compact individuality to serve some purpose connected with its environment: the process of propagation is the slow formation of an individual *from a pattern* already constituted, all that is wanted being the lodgment of the pattern or seed-form in soil congenial to the expression and expansion of it in a sympathetic protoplasm.

Under the operations of nature, there may be changes from the pattern form; for where intermediate influences interpose, there must be correspondent changes in the product. These changes constitute what we called Evolution, and there may be an endless variety of these changes, which are modifications of conditions and of forms; yet it would seem confined within the circle of the general

basis, which we may term the type of species. It is within the range of experience indeed to understand, that very considerable changes must of necessity take place by means of speciality in training, in feeding, in breeding and in climatic influences (and these agencies only confirm the accuracy of the great law of causality) while the species as a rule is preserved with tolerable distinctness. There may be cases where uncertainty prevails as to whether there is a line of clear demarcation, especially in tribes which have gone wild as compared with those which have had a long history of domestic treatment. But one thing we may rest tolerably sure of is that, under the processes of pure propagation, there cannot be the introduction *de novo* of forms and conditions which have not entered into the causal circle of elements. There is much said about "natural selection;" and to it is given a wide range of association. We hardly see how this should prevail to a great extent, seeing artificial processes can do so little. But granting all that can be demanded in this category, we ask, in the name of wonder, how can a complex adaptation of parts appear by nature, which ingenuity can explain not otherwise than as the construction of a creating and purposing intelligence? There is no analogy in nature for the first introduction of such a phenomenon. Time, however prolonged, cannot help in a question of this sort; what we call the operations of nature must be regarded as the results of a created original, with its concatenation of appointments, shedding the seed of its own conformation as a pattern for its propagation in an amalgam adapted for its nourishment. And as we have already

noted, the sympathetic Ether operates in extending the causal germs.

We should naturally come now to inquire under what circumstances we may readily grasp the idea of a Creator.* It is obvious, however, that the notion we have acquired of a primordial Ether, as the absolute infinity of primitive and essential substance, should be preliminarily grasped; for it by itself cannot correspond to our idea of a formal and personal Intelligence. There is not only no personality in any of the attributes we have discovered in Ether—not only no source whereby the origination of new conditions and new forms of things might be introduced, but nothing on which to ground or to express the limitations of a conceiving mind. It is necessary, therefore, that we should first have exhausted our inquiry into all the attributes of Ether, as essential and underived substance, before seeking those which constitute the positive and particular expression of them in the concrete form, of a personal and perfect Intelligence. That inquiry, like others, must proceed on observing the lines of phenomena brought before us in connexion with our present experiences. And one of these experiences is the gradual and almost imperceptible indications of mind as we advance into the more complex productions in the world of matter. We trace no appearance of mind in inorganic nature; moreover, we trace none in the vegetable economy: it is only when we enter into the field of the animal world that we discover not only sensation, but obviously what gives the subjective assurance of sensation, the consciousness of it; and this only by very gradual stages—each stage increasing in intel-

* See Appendix II.

lectual power till we reach its highest manifestation in man. The question therefore arises—If Ether is the absolute substance which has essential and eternal existence, and therefore the substance out of which all phenomenal existences are derived, whence have we mind? Whence have we consciousness? Whence have we intelligence? These three terms all lie within the same category, and consciousness is the basis of the others; without consciousness we could have no intelligence, for intelligence marks a connected or combined consciousness as applicable to a general knowledge of a subject; and mind is a still more general term as applicable to the exercise of cognition as a whole. Whence then have we consciousness? Consciousness does not appear in the clods of the earth, in the stones of the ground, in the trees of the forest, or in any plants of the garden, but it is observable when and only when we come to the animal economy; and it is seen in its highest manifestations in man. Whence comes consciousness? We have seen that the attributes of external things are those of visible quality and form, that the world of matter is objective condition and form—what we call inanimate things—things primarily derived from ether, and in all their changes sympathised with by ether, and having their functions carried on through ether. We have found no other substance in absolute existence, but this ether: whence then comes consciousness? What alternative have we left but to have recourse to ether? And we shall have occasion to see that there is in the animal economy, especially as it advances in the possession of many inlets, a representation of the bodily constitution in ether, and that from the very fact of its

being peculiarly acted upon and reacted upon itself, it gives forth a subjective realization of the impressions conveyed to it. There is a reason why there is no subjectivity in the material objects of the world. We have seen, indeed, that they are attended by an ectype of themselves in the etherial medium; but that expression either falls on vacancy or on other objects, so as to affect them in some more outward relation; but in the case of the animal subject this etherial representation is not spent on a vacant field, nor on something external to itself, but is confined to the operations of its own bodily self-hood, which it represents and is accordingly lighted up in these circumstances with the consciousness first of all of its own self-hood. And when the basis of this is sufficiently laid, it is from its spirit-nature equipped to express the consciousness of all the communications which come through the various inlets which are opened up with the external world. And not only this, but to express all the modifications of consciousness which arise by means of the varied organization with which the brain happens to be supplied.

But the question may be asked—Can we be thus dependant on material things for consciousness without falling into materialism? Those who ask such a question do not understand the economy of things, and it is for want of this understanding that materialism is misapprehended and has become a great bugbear to many. It ought to be known at once, that it is not matter that gives forth consciousness, but the etherial, or spirit representative, when formed into an Ego. It alone gives forth consciousness, and it gives forth the consciousness of the material object. It cannot

be disputed (it stands as a fact), that the material object is accompanied with its spiritual representation; and if we are able to show how this spiritual representation of the external object is carried to the Ego, we show not only the sources of consciousness, but the connexion betwixt matter and mind.

Section 7.—The circumstances under which Mind is developed.

We see, then, what are the circumstances under which mind is developed. A stone for example cannot develop consciousness; and the reason is because there is nothing in such an object, *i.e.* no means of concentrating its self-hood on itself, so that this self-hood might re-act in any one part of its body. Its self-hood is its own objective *corpus* or mass: it has no other: it has no subjectivity in itself: it can have none, because the very conditions which create subjectivity are wanting. But these conditions are found in the presence of an apparatus whereby the ethereal representation is played upon within itself; and not only this, but whereby also there is the capacity of response for re-action being made within itself, according to the kind of intimations made. A stone has no means of self-representation within itself, and no power of self-movement within itself, and therefore, of course, can have no consciousness of self. Nor can a plant develop consciousness for the same reason. True it is that a plant has several characteristics which are utterly wanting in a stone. It is organized by a cellular structure: it is characterized by variety of condition in the separate parts of its structure, such

as woody fibre, bark, leaves, blossom, and fruit. It draws the sap of its life from the substance of the soil, and passes it on converted by assimilation into its own nutrient qualities between the bark and the wood to supply subsistence to the leaves, and fresh nourishment for the development of the fruit, and as it passes, it undergoes a formative process in accordance with the cellular character of the plant. There may be also the manifestation, as perceived by us outwardly, of sensation in the plant, that is of disturbance of parts by the action of an adjacent object. For what is sensation, fundamentally? It is stimulation *ab extra*; and stimulation may be created on one part of an object by external influence on another part; but in the plant there can be no consciousness of sensation. And for the reason that, while there is what is called life* in the plant, by reason of the ministering of nutrition to all its parts, and by the chemical conversion of that nutrition into the separate conditions, and forms belonging to its different parts; yet there is nothing in the plant to set forth, and to concentrate an ethereal self-hood of its own, that is a spirit-representation of the plants' bodily economy within itself to

* Much mystery has been ascribed to the term life, as if it indicated some invisible causative power whereby *each* creature in the vegetable and animal world grows and propagates its kind. There never was a greater mistake. There is no invisible causative power so endowed. Life is but the activity of a causal arrangement in organic structures. And we say this from the fact that the process whereby the creatures live and move and propagate their kind, can readily be accounted for and expounded in the process of natural law.

re-act upon itself as the attitude under which alone a subjective consciousness of its beinghood could be manifested. The tree, of course, like everything else material in the world, hath its own *external* representation in the etherial spirit-substance ; but all this is mere objectivity ; and an objectivity too, which as I have noted serves a very important end ; for were not the projection outwardly expressed, we should not be able to see the object, nor any objects ; nor would the affinities, which are constantly playing throughout all nature, have their validity asserted as phenomena everywhere prevailing. What is demanded then in order to the subjective development of consciousness is the etherial representation of the bodily self within itself, and concentrated at a pole or centre of action in order to the development of the intellectual attribute.

The apparatus whereby alone this wonderful phenomenon can be brought about, exists in the animal economy only. This apparatus is found in the nervous system of the creature. And when we pass into the category of the animal world, we find a very gradual and almost insensible approach to the acquisition of a nervous system, such, that the line of demarcation betwixt the vegetable and the animal departments can scarcely be drawn. While, therefore, sensation becomes more marked in the animal than in the vegetable, by reason of the connexion in which one part with another is established through the agency of nerves, as connected with muscles, yet there can scarcely be the shadow of a doubt that, in the case of many creatures, such as *e.g.* the worm and a host of others, it is in their case a process of reflex action, or

what we may call sensation without the consciousness of sensation.* Under what circumstances, we may ask, is it possible to have the consciousness of sensation developed ? We may answer, by the organization of a brain ; and this development is manifested in proportion as that organization has its validity built up from the smallest possible beginnings to the highest possible complexity as in man.

It may be generally stated then that the foundation of self-consciousness lies in this, that there must be a nerve-system from the body carried to a centre, as the nucleus of a brain. There the glimmer of consciousness may be developed, but so feeble as to demand little or no response beyond what is required in vegetable life. We find that such a state of things prevails in point of fact. True it is that it might be regarded as a difficult question for solution, whether certain movements, in the initiatory stages of the animal world are not the tokens of reflexive sensational disturbances rather than of conscious operations ; but one can have no hesitation in concluding for the existence of consciousness in cases when to the creature is given an additional sense, such as eyes, in virtue of which it is able to turn aside from obstacles which are observed to stand in its way. The fact stands (which nobody doubts) that the more the animal is endowed with external senses, beyond that of touch, as the first natural sense of the creature, the more it

* The facts of reflex action, or the manifestation of sensation without the consciousness of sensation, has been well illustrated by the decapitation of a frog. Stimulation of a limb, by pinching or by a drop of acid, is followed by the withdrawal of the limb.

has its consciousness enlarged. And still further, when we take into account the gradual increase of brain formation, whereby new ideas are manufactured out of those that have been registered, as first brought to the mind by the external senses—ideas such as the relation of one thing to another; or the consciousness of the *me* itself, as distinct from that of the object envisaged; or the discovery of inferences drawn from the comparison of objects which have some relation to one another; or the power of recalling ideas which had formerly a place in the mind; or the power of evolving new pictures out of those we have once apprehended; or the power of imparting or implanting new ideas in addition to an assemblage of present ones as when we have before us a purpose to fulfil, and have difficulty in knowing how to accomplish the purpose: I say, when we take into account the increased complexity of the brain apparatus whereby our faculties of thinking are augmented and varied, we see at once the close connexion which is made to subsist betwixt the material instrumentality of thought which initiates the movement, and the ethereal representation wherein is the actual consciousness of self, and which must be regarded as the receptacle of ideas and therefore constituting the general ground of the intelligence of the *Me*.

So dependant are we as living creatures on the prepared and specific instrumentality of thought for our particular thinking, that many have felt themselves forced to conclude that consciousness must somehow be regarded as itself an attribute of a certain kind of matter; but without doubt this conclusion is a grievous mistake; and the sound analysis of physical phenomena

proves it to be a mistake. We have in the physical world, as has been noticed, the operation constantly of *pure spirit-substance* in connexion and along with material objects. We have seen that in the physical world, there is not one object but has its spirit representation in the universal Ether, as *spirit-substance essentially*; and the proof of this among other things is the wonderful privilege that pertains to said spirit-substance in that it can never be so crowded with representations of things, but that by reason of its elasticity, and consequent expansion for a fresh surface, it has always still an open receptivity for admitting additional representations; and this without the confounding of one thing with another; shewing therefore a capacity wholly beyond the prerogative of matter as such. What then? Why we are constrained to see that the particular organs which in the brain stand as initiating new spiritual forms, do, through these, initiate fresh forms of thought—organs which, as creating new spirit-forms, constitute therefore special facilities for the generation of the definite classes of ideas, carried into the mental field, and which therein co-exist in mutual relation to one another, and have each its own ethereal characteristic. There is the impression laid up in the cellular conditions of the cortical substance of the brain, and there is the ideal counterpart which is carried to the ethereal platform which constitutes the Ego. The former serves for the purposes, first of all, of memory, in which case the Ego has not what is simply called cognition, but *re-cognition* of that of which it is already in possession, while the vast multitude of stored up impressions, as gathered not only by observation of

external things, but gathered in the course of reading and study, constitute a field for the exercise of Imagination, Conception, and other processes in the analysis and synthesis of thought. We thus apprehend, then, a constant and close connexion betwixt mind and matter, which is perfectly analagous to the connection betwixt spirit and matter in the objective sphere. This fact cannot be too minutely considered. While the initiation of each separate mental movement takes place through the association by separate members of the cerebral organization carrying their respective impressions, it always, and invariably in each case, is accompanied by its own etherial response, which in that case is an idea, which enters the territory of the Ego; and herein we have what is called Mind. That the brain is the instrumentality of mind cannot be questioned, on the sure ground that not only does disease of the brain produce disease of the mind, and softening of the brain produces want of the memory, and brings on mental imbecility, or amentia, but that aught which produces inactivity or immobility of brain induces *coma*, or a state of unconsciousness. Had we ere now understood the precise circumstantialia which attend all physical phenomena, we should have been able to master the great secret which explains the fact of matter being caught by, and received into, the intelligential sphere as acquired knowledge.

I have observed that, in the world of objective matter, we are everywhere surrounded by spirit, and that to spirit we are indebted for the phenomena presented by matter. We see this illustrated in the telegraphic wire. There we find that the conditions and

forms attending the vibration introduced at one terminal of the wire where initiation takes place, are carried to the other terminal, and are there revealed in all their accuracy, not only in the fact that the sound as a quality in that vibration, is maintained, but in the convection of the very words as uttered. I ask, what are the nerves in the animal body but telegraphic wires which reveal the conditions of the body as the basis of the *me* to a local terminus within? And what are the external senses but termini with attached nerves of various qualities, fitted for the reception and transmission of separately conditioned ingredients, such as savours for taste, odours for smell, sounds for hearing, colours for sight, as well as modifications of touch, of which in each separate case a consciousness is excited. Nor is it the mere vibration that is transmitted, but in each case the vibration is so to speak loaded with a quality emphatically its own, and the quality accordingly is transmitted along with the vibration. There are mental philosophers who will tell us that the vibration which is communicated to our ears when a piano is being played, has supplied to it by the mind the various qualities of sound: but this is a doctrine which cannot be maintained. The mind supplies nothing whatever from itself, but is emphatically and purely receptive of all that is communicated to it, and has the consciousness of it accordingly. The mental part is simply receptive (so far as regards cognition) of the ideas carried to it; and these ideas are either the forms as they exist in the external world, or as they are manipulated by the analytic and synthetic processes of what we must call the internal senses.

Section 8.—What constitutes Intelligence.

Here let me notice how the Etherial spirit, which we call the Soul, has not only the experience of single acts of consciousness as ideas are carried thereto, but has, as it may be called, a conjunct expression of this final and lofty attribute of what may be called a combined consciousness which we denominate Intelligence. I ask, what is Intelligence? and I answer it is a multiplied Consciousness, or an intuition of what stands as a series of conscious acts in one general focus. An insulated act of Consciousness cannot be called Intelligence. At all events, before we can be said to have Intelligence, we must have the exercise of Judgment therewith. An insulated Consciousness cannot discern truth from error. It is constrained to receive things as represented, however false or absurd they may be. This is illustrated in dreams and mesmeric states; and it is only when we come to be fully awake, and when we are able to apply Judgment to these states, that we can see the absurdity of them. What we say is, that in the *me* there is a collected assemblage of individual cases of Consciousness; and this we call Intelligence; but as noticed, the foundation of correct intelligence lies in the exercise of Judgment, which attends all acts of normal cognition. The intelligence of man begins with representations from the external world, and is added to by the inner workings, which give what may be called Imaginings, Memories, Inferences, and other sentimentality which are thought out, and become the experiences of the *me*. Out of all these separate cases of consciousness combined, we have that which constitutes the human

intelligence; and that this intelligence is not the development of mere matter is obvious enough, from the fact that on the central platform of thought is lodged an endless number of distinct ideas, each and all held in its individuality, so to speak, in the self-same locale, without collision and without confusion. This is one of the remarkable prerogatives of spirit-substance.

And that spirit-substance should in these circumstances manifest this subjective prerogative is most natural:—first, because we know of no other primitive substance that is assuredly made known to us, as the fundamental entity of existence: second, because universal substance having an *objective* outlet in respect of its physical qualities, may well be regarded as having also a *subjective* outlet, when circumstances are favourable for its manifestation: third, because we have no right to assume another and unconnected substance, insulated, and separated intrinsically therefrom: fourth, because it is demonstrable that the phenomena of consciousness are closely connected with, and inherently an offshoot from, the self same substance, with which matter itself stands connected: fifth, because the fact of one and the same primary substance being in all circumstances represented by the material instrumentality (each organ yielding its own spiritous images), offer a satisfactory explanation that intelligence emanates from the etherial spirit, and this is the only satisfactory explanation of the vast variety of intelligences which are marked out and defined by the respective cerebral organs which prescribe their particular ideas.

Section 9.—Mind in its highest expression operates in conjunction with Matter.

There has been brought into view, as already noticed, the high prerogative of the all-pervading spirit-substance as made to play in physical conditions, a prerogative which as we have seen comes into manifestation under particular circumstances, an attribute which, as we have seen, lays in the whole animal kingdom the foundation of a mind, differing in each case according to the diversity of organization. I have endeavoured to point out under what circumstances matter is produced from said primary substance, and what therefore, gives rise to the laws of affinity which prevail among the constituents of matter, and the circumstances under which matter functions in the play of cosmical forces ; it now falls to be considered, not simply under what circumstances mind is developed from the self same source, but how mind operates in connection with matter, and is dependent on the organization of the cerebral system, and is expanded according to copious variety in that system, for the different faculties or powers by which any and all gradations of mind happen to be characterized. It may be repeated, in addition to what has been stated, that the all pervading etherial spirit-substance, which we have found to be constantly operative in the great physical arena, is operative also, in the development of mind :—first, we know of no more fundamental substance, as an actually all-pervading element, than Ether ; and as we have found that Ether is essentially of a spirit-nature, in that, unlike to matter, it is receptive of any amount of epigraphs at

the same time and on the same area ; and there is no antecedent reason why said substance should not give forth the characteristic of consciousness when circumstances favour that an object should attain to a sensible subjectivity of its own. Second, we know this, that in the arena of mind, as a foundation of mind, there is and must be a basis of what has been called "mind-stuff," out of which consciousness arises ; and if it be a question whether we shall start the hypothesis of an *alien essence*—of which we practically know nothing—nothing abstractly of its relation to, or connexion with, other matter or other substance of any sort, and therefore of being of necessity in a maze of mystery respecting it ; or whether we adopt that substance which is of necessity always in connexion with matter and representative of the conditions of matter, and which is perfectly analogous in its capacities of holding and of setting forth within one area, a vast combination of forms, there can surely be no doubt for a moment as to which alternative one must choose. I have already set forth the grounds on which this spirit-substance must be regarded as representing fundamentally at the basis of the brain, the spirit-personality of the bodily system, and how and why this spirit-personality should be endowed with consciousness.

But there is another—an abundant and abiding reason why we must regard the spirit-substance in question as inherently endowed with the attribute of consciousness. We have spoken of the etherial medium, as that generic medium which contains *in gremio*, and therefore negatively, all the qualities which are manifested positively in the all-conditioned

Personality. We have, I think, the completest evidence of an absolute Personality, based on the platform of an infinite Impersonality—a personality which, as I have said, is the positive and inherent manifestation of all that is hidden in the Impersonality: the one the supplement of the other, in as far as the Impersonal without the Personal would be the susceptibility of endless conditions and forms, without the possibility of initiating any, and the Personal without the Impersonal would be the positive in thought without the positive in action, or the capacity of action: it would be a Framer without the material and the platform to work upon, and therefore without the means of exercising it. Both, therefore, are essential in order to the production of the objects of creation. What I say then is this, that if the absolute Personality is endowed with the foundations of positive being-hood, of which intelligence is the consummation, the infinite Impersonality must have the susceptibility of shewing these foundations developed into reality, and therefore of manifesting intelligence as its consummation, when animal creatures are made capable of displaying this attribute. We may thus in some measure approach to the characteristics of the Personal through a knowledge of those belonging to the Impersonal.*

Having then good reason for concluding that the etherial medium, as essentially a spirit-entity, carries within itself the capacity of developing consciousness, and of being manifested as intelligence, it should now be our business to show under what cir-

* See Appendix II.

cumstances mind is manifested in the animal frame and how mind is expanded according to the number and variety of the organs with which the animal creature happens to be endowed. If I were asked to say what are the conditions of intelligence, I would answer an accumulation of separate and varied acts of consciousness. Intelligence barely begins with simple naked consciousness; and in many of the humblest of the animal race it can amount to nothing more than mere insulated consciousness, that is, it can be regarded as little more than the expression of animal sensation. If a creature has simply and solely but one sense or inlet as the channel of its consciousness, as for example that of touch, it has of necessity not even the incipience of mind, and its instinct is to be guided by that of sensation alone; and in a sense we see this exemplified as a stage but a little beyond that of the vegetable economy. Give to the creature the sensation of smell in addition to that of touch, and you light up this twofold sensation to become a minim of consciousness. Let it have a mouth with the capacity of distinguishing one quality of food from another, and you raise it to a still higher platform in the range of animal life. In order to receive this threefold order of impressions there must be the nucleus within, of an organ of receptivity for this more expanded experience. Let it still further have the organ of hearing, and its consciousness will become developed into something like incipient mind, in as far as it has thus a series of spheres in which it can play its part. Endow it now with the sense of sight, in addition to those already named, and you very considerably expand the domain of its range; and such

an equipment of necessity characterises a large number of creatures on land and in water as well as among the feathered tribes that lodge in the branches of trees, and so disport themselves in their respective spheres.

But these inlets are after all but the foundation of mind. Besides the avenues of the external senses, each supplying its own department of consciousness, there is in some of the lower animals not only an organ for the exercise of memory but an approach to some of the higher attributes of thought. But it is emphatically in man that the internal instrumentality is developed, and varied to the highest possible extent. For example, there is in man not only a repository wherein impressions are registered, and an instrumentality whereby these can be recalled in the exercise of memory; but there is further an agency for bringing up not simply insulated facts as matter of memory, but a number of associated impressions which are curiously collected and united in one pictorial representation; and this process is called Imagination. It is to be noted, then, that the facts of remembering and of imagining are each separate acts of consciousness, and of course add to one's intelligence. And it is remarkable how Intelligence comes to be enlarged in the case of man. There is the great faculty of Conception with which he is endowed—the faculty whereby genius is displayed—the faculty which gives to man a creative power of thought—the faculty which is exercised when a difficulty presents itself, and which has to overcome some difficulty when a purpose has to be fulfilled, which demands the employment of recondite resources for its accomplishment. This process, like all other processes of thought, is dependant on a

special organ adapted for such uses; and by a refined exercise of association, it carries its representative spirit-ideal to the central area of the personal consciousness. Here, also, of course, an important accession is made to Intelligence by such conscious conception. Besides, throughout man's waking thoughts there is the constant exercise of the faculty of Judgment—that faculty whereby he is enabled to see truth as distinguished from error, and whereby he is preserved from falling under delusions as in dreaming, when the Judgment is shut out from exercise.

In this way, man's area of a multiple consciousness as constituting the great field of his Intelligence is much enlarged beyond what it can be in mere animal nature, in as far as many of these separate states of consciousness are wanting in them; and as has been noted, they are all brought to have their proper resting place in the central platform of the conscious *Me*.

But this is not all: it is far from being all in the long list of departments in which the consciousness of man revels. Man has also, by means of other special qualities given to his cerebral apparatus the great prerogative of seeing *the relations of the not-me* in virtue of which there is a capacity of an endless extension of his knowledge. The creature that is confined to a cognition of *the relations of self* merely, has in him the little narrow world of his own self-hood only, and his own wants. He may see the varied world outside of him, but the relations of each and all are shut out from his consideration. It is different with man—different as regards the wider arena of knowledge—different in the fact that there is a cognition of the relationships which belong to ex-

ternal objects generally, as compared with those which can see the relations only which pertain to self; and is different as regards his concern for the wants and requirements of others. And here particularly it is, that the whole field of morals is opened up to him—a field which, lying in the fundamental idea that every creature, endowed with the capacity of pleasure and of pain, has its *God-given rights* as its own native property shews that any infringement of these constitutes an offence against the law of morals—a law by the way which is graduated in force according to the elevation of the creature to which the rights belong.

Section 10.—The Foundation of Morals.

The question as to the foundation of morals and of the law of morals is a very important one. It is acknowledged to be so; and many a struggle has there been for its reconciliation with this, that, and the other theory, which has been propounded as adequate foundations. Satisfaction has not been found with any of the pleas which have been advanced;* but that there is a basis which stands in consistency with the development of this great principle, as seen in the various

* It would be out of place here to give an account of the various theories which have been advanced as foundations for the ethical principle of morals. Some have pronounced it to be God-given in the sense of being an impress from God, and therefore that morals is an argument or proof of the being of God: some ascribe it to a certain fitness or suitability of actions: some hold that morals is a new instinct in the human mind. some hold that its foundation lies in self-interest, others in utility or happiness. But while all of these are objectionable, there is one

conditions of social life, can hardly be doubted: and I offer that just propounded as the true ground which operates variously in this great department according to the enlightenment which the mind has received.

I believe that moral states are as thoroughly dependent on cerebral action as any other manifestation of mind, not (be it carefully noted) that any cerebral or material operations, which are adapted simply to carry or convey a particular class of impressions, can for a moment be regarded (being physical states in themselves) as concerned with *moral ideas* any more than with the *ideas of physical things*; for moral ideas (as we shall more fully notice hereafter) arise from a cognition of a particular *class of creature-objects* which come before the mind. If the object of our thought be purely a thing without life and unassociated with a personal creature having conscious sensation, there can be no moral characteristic therein. There must always be, either directly or indirectly, a sentient personality, not only having life, but also *susceptible of pleasure and of pain*, before the element of morals can intervene. That creature may be one's own self, or any other person, or it may be any of the lower animals: hence, I define a *moral idea* to be that which represents the *affecting of a creature susceptible of pleasure or of pain*. It is obvious, then, that such an idea is ascribed not to any subjective virtue vested in the human intelligence as such; but that it arises

important preliminary which all of them have left unconsidered, and that is the *moral Idea* out of which the principle of right and wrong flows. This subject will be more fully considered when I come to the question of Will.

from the kind of object that is apprehended, and is attributable therefore to the apprehension of injury or of benefit done to an animal creature. Brute creatures can see the injury done to another, and they can see the help rendered to other creatures in their need; but as a rule, they *do not apprehend the relation* which one creature bears to another. It is therefore the peculiar capacity which man has in *cognising the relations of not-self—the relations of things* to one another, that gives to him the great prerogative of moral discernment. This may be called intellectual altruism. And in what does this prerogative consist? I answer, it consists in his *ability to see the fitness of things*. In other words it lies in his ability to see the relations of the *not-me*, and the harmony or want of harmony existing in these relations. It is for want of seeing the relations of the *not-me*, that the lower animals, as they are called, are incapable of such ideas as are common to man—are incapable of looking into the future, and are so narrow and contracted in their sphere of existence compared with man.

The lower animals, indeed, can apprehend the relation of things, *so far as things affect themselves*. They know what food is adapted for them, and they repair thereto to obtain it. They know what things will injure themselves, and these they avoid; but their apprehension does not extend to the cognition of what have been called altruistic relations—the relations of the *not-me* or the connexion in which one thing stands abstractly to another. Hence, unless it be in the case of that instinct, which is given to a creature when rearing and nourishing and protecting its young, the lower animals want moral intuitions.

Hence, also, the tremendous extension of mental vision to man, or his altruistic ability to cognize the relation of one thing to another in the vast outer world.

This prerogative of apprehending the relations of the *not-me* is properly the foundation of human Reason.* The question then for us to solve is this:—What gives to man this expansive power of discernment? What gives to man the prerogative of seeing more than is patent strictly to the outward vision? If I see a boy in some one's garden robbing apples, what gives to me the idea that he is stealing? It cannot be the bare fact of his plucking apples from a tree, but it is the apprehension of the non-relationship of the boy to the owner of the garden, and hence the inference that this fact is an injury done to the proprietor of the garden.

Section 10.—Mental states are reflective of Material conditions.

There can be no question as to the distinctive qualities of separate nerves as adapted for the reception, the association, and the conveyance of special characteristics of impressions. Among the outward senses we find that the nerve in the nostrils will take on the

* Reason is a term indicating a cognition of harmony or fitness in the relation of things. The lower animals have this in what pertains to their own personal condition. But this is so very small a portion of the cognition which pertains to the relationship of things generally in the world, that we apply the term Reason to man only as observant of the fitness of things as connected with one another in the world.

quality of flavour, and hence we have the sensation of *smell*; another will take on the quality of savour, and hence we have the sensation of *taste*; another will admit only the impressions contained in the light, and hence we have the sensation of *sight*; another set of nerves again are affected by bodily contact, hence we have the sensation of *touch*; and still another is affected by the vibration of the air, carrying certain characteristics of sound, whence we have the sense of *hearing*. Each of these sensations may carry ideas in them. With the sense of smell we may have the idea of a certain plant or flower; with the sense of taste a certain kind of food; with the sense of sight the idea of an object seen, and so with the other senses.

There is obviously a still more remarkable refinement in the distinct individualities of nerve which pertain to the various instrumentality which constitutes the complex organization of the brain. There we have not only the reservoir of vesicles of gray matter which form the repertory of *Memory*; but we have those nerves of white matter which associate thence impressions of all kinds that are laid up therein, and which convey them to the central Ego, wherein they are lighted up as ideas of the mind—the centre where, as I have noticed, the bodily representation is fundamentally converted into the conscious Me, and where all ideas brought thereto become the cognitions of the Me. And this apparatus, which serves the processes of memory, serves also those of *Imagination*, in which an impression draws to itself by association a number of other impressions, which are constructed into what is called an ideal picture—a picture not of one idea only, as is an act of memory, but of other

associated ideas, or properties of ideas, which when joined, constitute a picture of *Imagination*, all the parts of which are drawn from the same reservoir of impressions. From the same reservoir are drawn also by association another set of impressions under what we call *Conception*; and this takes place when we have before the mind what has been called a *schema* of thought to be completed, a schema void of some element sought for, which requires some accessions in order to its empty part being filled up; that is a *purpose* demanding fulfilment. The process of nerve operation here is remarkable, in that the quality and form of the element wanted is, so to speak, searched for; and if it is to be found in the area of laid up impressions, it will be seized and appropriated to fill up the blank. And here it is that genius is illustrated and manifested; under *Conception* we have *creations* which display forms and their relations which are *new* and fresh presentations before the mind.

I might go on, and point to that peculiar building up of nerves whereby we are enabled to *draw inferences*, first, as to the *character* of things; second, as to the *uses* and *applications* of things; and third, as to the *causes* of things. It has to be noted that all inferences are to be obtained by means of *comparing one thing with another*, that is, of comparing the subject for which an inference is desired, with a cognate subject in the mind to which the inference desired is already attained and attached. When we judge as to character, it behoves us to have already before us a *standard* (the major term in logic) to which the object to be judged (the minor term) is carried, and that standard the best of kind in our estimation; and thus

by means of the comparison, the discernment of character is ascertained. In plain terms, the nearer the object comes to the standard, the higher in character is the judgment pronounced on the object. Again: when we judge as to the *consequences* of an action, we require to have already before the mind an analagous or cognate case as a *standard* in our experience, in which a corresponding action with *its* consequence is before the mind, and by means of the comparison, we can lay hold of and apply the corresponding consequence. And, in like manner, when we inquire into the *cause* of any denouement or upshot, we require to have before us a correlative case, to which *the cause is attached*, with which to compare it, when we are able to lay hold of *the cause* as matter of our experience in an analagous case; and thus *we apply this cause*, as the cause which we seek for in order to account for the consequence in question. This latter is called *Induction*, as the other is called *Deduction*, but the mental process in both is the same. And in this light how simple does the doctrine of Reasoning appear, whether in the exercise of Judgment, or in that of Induction and Deduction on which so much has been written in the field of Logic. What the precise organs in the Brain are by which these important results are accomplished has not yet been discovered; but that the functions now referred to are accomplished by cerebral instrumentality there can be no doubt.

We find then that every process of operation in the human mind is carried on by means of brain instrumentality, and in every case it is accounted for by means of the refined and delicate qualities ascribable

to the brain organization, that is to the peculiar qualities of the nerve apparatus in its several parts, and to the structure of this apparatus in its conformation of parts. And what fundamentally lays the province of Reason in man is the capacity of associating the relations of the *not-me*. Without this capacity there could be no process of adapting one thing to another in the economy of human action.

The same thing has to be said in regard to the more active properties of human thought in the exercise of *Will*. This is the more evident because in this department of thought, as we shall see, Will is always stimulated by motive, and motive is neither more nor less than the emotion created by the contact of an idea introduced upon the *me*;* that is fundamentally, the contact of a particularly conditioned impression upon another condition in the repertory or storehouse of impressions which constitute the furnishings on the material side, creates an emotion in the material which in spirit is conveyed to the *Me*. There can be no doubt that in direct connexion with the bodily economy there is a cerebral centre of resort, to which all nerve operation conducts, and whereon the ideal forms which come to the *Me* are founded; and as the common depository of impressions from which the accumulation of ideas in the creature's experience is conducted. Whether this repertorium of ideas called the *Me* or *Ego* be at the medulla

* An idea implies preliminarily an impression. The impression has respect to the material side in virtue of which we have bodily sensation: the idea is the counterpart of the impression, but on the spirit side. The sensation under emotion constitutes what we call Feeling.

oblongata,* as I am much disposed to believe, I will not pretend to say; but I unquestionably conclude for such a foundation of the intellectual me in this material economy to which we belong.

What would at first startle some in coming to such conclusion would be, that we seem to make too much of gross materialism. It is quite otherwise. We work through and by means of material organs, but the production of ideas and of thought is exclusively in the spirit-substance: without a foundation of materialism it would be impossible to get at the spirit-nature of soul, which in this constitution of ours is by means of the material organization. No scheme could be more spiritualistic than that which I seek to proclaim; for I strive to shew how it comes to pass that in strict connexion with a material instrumentality in every department of mind, the great fact of mind itself, as a grand combination of separate conscious states, is unequivocally and purely the phenomenon of an essentially immaterial or spirit-substance, and this phenomenon of consciousness I wish to shew is not only the effulgence of spirit-substance, but the final and ultimate attribute of said substance as brought into practical manifestation in the peculiar circumstances under which brain organization gives scope for its expression.

* "This bulb is a crowded collection of active nerve centres, —a thoroughfare, ever crowded with nerve impulses from and to the higher centres"—(Dr. McKenzie, in Bain on the Senses). When we consider what a multitude of future developments are bound up in a single cell (the human germ cell for example) we need not wonder at the endless multitude of impressions that may be lodged in the material side of the *Me*.

CHAPTER II.

THE FOUNDATION OF SOUL-ECONOMY, AND THE GROUNDS OF VARIED MENTAL OPERATION.



Section 1.—Dilemmas of Philosophers.

THE all-absorbing question of mind has been endlessly debated, may we not say in all manner of ways distorted, by two different schools of philosophy; yet neither of these schools have been able to indicate any possible or natural scheme to account for the origin of souls, nor even to vindicate all that has been allowed as to the operation of souls. We have what is known as the *a priori* school presented under various hues, which on the whole founds upon an independent mental equipment, mysteriously operating apart from the body, and cognizing some sort of objectivity which is not regarded as reality, and this on rules not easily understood, and less easily analyzed, and certainly not consistent with the common convictions of mankind; and again, we have what is known as the *a posteriori* school, which does not question the fact of a subjective consciousness: which accounts in some way not only for a material objectivity,

but which directly craves it, by making consciousness a characteristic of matter, or leaving it otherwise as a blank mystery, not admitting of solution. This scheme is equally unable to indicate, and certainly fails to explain, in what way we obtain cognition: it fails to show in what the philosophy of consciousness consists, or how it comes to be displayed.

There is an obvious reason for this dilemma. It arises from the fact that little or no serious attempt has been made to discuss and make manifest what is properly the philosophy of substance. We have no doubt heard much of the question of Ontology; but it would seem as if there was a *ne plus ultra* in that direction—a *beyond* into which it is not permitted for philosophers to venture to find their way as being absolutely a *terra incognita*. We have no end of surmises, and some of these not very definite or consistent, as to the ultimate atoms of matter, what they are and of what they consist, and an equally indefinite supposition as to the source and ground of intelligence.* I have endeavoured to grapple with this profound subject, and (as I believe) upon the prin-

* Philosophers in seeking for the ultimate constitution of matter have generally taken for granted that the principle of Atomism is an established fact; but no sooner have they so concluded than their difficulty began. Were there originally many ultimate kinds of them, or only one? Were they all material atoms to be regarded as centres of Force and Motion? or were there also centres of consciousness which have been termed monads? Were the material atoms vortex rings of Ether, as Lord Kelvin has suggested? and indestructible and indivisible as Helmholtz has averred? Were they originally simple or complex bodies? And if they were atoms of Ether, how came they to be matter with force and motion in a con-

ciples of a sound induction. The value of any discovery depends upon its practical utility; and the soundness of any discovery depends on its consistency in all its applications. The value, indeed, of any fundamental principle may be said to lie in its general applicability to the natural and needful exposition of the phenomena of the world. We are conscious of the great fact of a material world, and we are conscious also of the equally great fact of affinities, as pertaining to the separate qualities of matter; but where have we an ascertainment of the ground which gives birth to this consciousness? We see the operation of *cause* constantly at work in every department of the great arena of nature; but have we as yet obtained a definite idea of what strictly constitutes Cause? We see the operation of an endless multitude of forces in the economy of the world; but have we ascertained the source of them, and can we give a clear and distinct rationale of their respective functions, whether on the arena of matter or on that of mind? Many of us believe in the existence of spirit-substance, as distinct from matter-substance; but who has expounded the precise connexion and communion of the one with the other? or who, indeed, has appropriately defined the one and the other? We speak very naturally of

scious world? How do we get a universe of thinking beings from the theory of atoms? What is the starting point under the original distribution of atoms? How are these enormous problems to be satisfied by the theory of a primary atomism? Talk of Evolution! What in this light is Evolution? It is a name: what else? The marvel is that man will avoid a conclusion which meets him at all points, and plunge into an area of darkness and of difficulty from which there is no escape.

the *me*, with its self-consciousness and its supposed independent power of self-determination; but who hath set forth a plausible account of the origin of the *me*; or have we even yet any satisfactory exposition of its self-movement, if it be self-movement, or of its position and relation to our material constitutional framework? Again: we are all agreed that there is the attribute of Morals pertaining to the rational understanding, but we are still waiting for the discovery not only of what constitutes the source of moral sanctions, but for a valid foundation to all varieties of matter and of mind which will bear the test of universal application. It is allowed that in the animal world up to man, there is a gradation of mental states from a narrow consciousness to a wide intelligence; and, moreover, it is supposed that these mental states are graduated or defined by varied cerebral conditions; but hitherto we know little of the *modus operandi*, and still less of the *modus efficiendi*, in accomplishing the separate results. We have in man the highest conditions of mind known in the world; but we are still in the dark as to the sources of our varied reasoning powers, either as to the fountain and foundation of morals, or as to the laws of human freedom in the exercise of Will.

A deeper insight into these and similar questions is surely very desirable, if it were only to set at rest the heaving strivings of the many in their constant and tantalizing attempts to solve the enigmas of existence; but it is specially desirable, if it would serve to explain many of the secrets of life, and serve also to harmonize the great scientific problems which lie for classification in one great unity, and thereby open up to

view not only the endless capacities of the grand field of nature, but to connaturalize the whole economy of the world, and thus exhibit more truly what the genuine aspects of religion are; and, farther, show what are the well grounded hopes we may entertain with respect to the future, and how mankind may ultimately be solidified in our common mind and judgment.

We find distinguished philosophers not only still debating whether there be such a thing as natural realism, but giving forth the dictum that, apart from the thinking mind, we can have no assurance of an objective world.* It is granted, of course, that apart

* "Natural realism (says Professor Pfeleiderer in his Gifford Lectures, p. 83) is the popular opinion that our knowledge of things is given to us simply through the perception of the senses. In this view the soul is represented as like an unwritten sheet of paper or as a photographic plate, on which things make copies of themselves, so that they come into our consciousness exactly as they are in themselves. But Physics, Physiology, and Psychology have irrefutably shewn how erroneous this popular realism is. Sounds do not lie in the vibrating bodies or in the waves of air which proceed from them, but they arise, first, in our hearing ear: colours do not lie in vibrations of the Ether, but arise only in our seeing eye; and the same holds true of the sensations of smell, taste, and touch. But even extension and motion depend for our consciousness on the perception of space, by which it is easy to perceive that they cannot be given to us from without. Just as little as the nerves of the eye, can those of the sense of touch convey into our consciousness spacial copies of bodies: on the contrary the spacial image or perception can only be sketched by the self-activity of the soul, and on the ground it is true of certain signs given in sensation. But if spacial extension and form are just as subjective as colour, sound, and smell, what remains of the material world of bodies?

from our own personal thinking, we can have no assurance of anything whatever; but to entertain the thought that the realities of objective existence are de-

And what right have we then still to hold our perceptions to be simple copies of things themselves? Nay more, what guarantee have we for holding that there are any things outside of us which correspond to them? What ground have we for determining whether our representations are not merely subjective? And whether our assumption of an existence of external things is not a pure prejudice sprung from the conceptions of substantiality and of causality which have been arbitrarily fashioned by us? With this conclusion (which was drawn in Hume's Scepticism), the world of the senses which empirical realism had held to be the complete or even the *only* reality, became an unsubstantial appearance or phantasm, a chaos of impressions and representations of our consciousness, to which we are not entitled to ascribe either reality or substantiality, or causality, or regulated order according to law, and which therefore hardly signify more than do the illusion of a confused dream. This was the natural and inevitable end of the empirical realism which made the knowing mind the passive receiver of a truth given from without."

It is to us matter of wonder how this author, like others before him, advocating views so doubly contrary to the spontaneous sentiment and feeling of mankind in every age, could reconcile to himself the fact so remarkable that amid all the accidents and changes of life, all parties should have the *self-same* forms of historical representation in their subjective consciousness, if there were no outward forms as the one foundation of them. If thinking of outward objects were like a "confused dream," it must be the marvel of marvels how it comes to pass that, when reference is made to objective things, all men should dream the same things. Our author allows that this form of idealism had its rise from objections urged by Hume; but we are in a position fairly to meet, and fully to answer, and obviate the difficulty urged by Hume, who challenged a *connecting link* betwixt the external object and the subjective mind. It is remarkable that the example of the photographic plate has

pendent on our thinking, or that our thinking is not dependent on the world to which we are introduced, seems to us at once irrational and absurd. To be sure, when the plea of all popular conviction is set forth as a truism, which has secured, and secures, the common consent of mankind, viz., that we see a tree in one's garden because it is there, Hume met the question

not shewn such philosophers that, as there is a connexion formed between the object and the photographic plate, so there must correspondingly be a connexion formed betwixt the object and the eye of the observer. One cannot help asking Professor Pfleiderer, what the use can be of the nerve attached to each of our sense-organs, as so many electric wires, if not to carry messages of things as they are from the external world? He regards space as a purely subjective form of thought. I hold that we could have no idea of space, but as gathered from the objects of the world. Surely it is a matter of common experience that a material object occupies so much room. What is this room or space but the extension that is measured by certain boundary lines. The same reasoning applies to the conception of time. As space has regard to *extension*, so time has reference to *duration*. If space be a boundary line to extension, so time is a boundary line to duration; and for this latter therefore we must have experience of movement. Both space and time therefore are forms of thought gathered exclusively from the data carried to us from the external world. It is equally absurd to suppose that sounds are not in the vibration of material things, but in the hearing of the ear, or that colours are not in objects of the world but in visions of the eye. How can the ear hear apart from the sounds that are uttered? And how can the eye see colours apart from the presentation of them? And if there be no external presentation of them, how can two or three separate minds agree as to the facts simultaneously set before them? Physics and Physiology and Psychology cry out against the doctrines propounded by this philosopher and the school of thought to which he belongs!

not only with a caveat, by pointing out that the percept (the tree) was after all a subjective or mental phenomenon in our consciousness ; and by questioning (if the idea were originated by the external object), where is the *nexus* or chain which links on to the mind the object seen as external, so as to make it the subject of thought in the mind, he started a puzzler. This enquiry involves an exposition of the *origin of Ideas*. Let us give attention to this question.

Section 2.—There is a nexus betwixt Matter and Mind.

It will be allowed on all hands that the first set of ideas which enter into the mind from the days of infancy, are the ideas of external things ; it will be allowed also, that the ideas of external things are momentarily present to our waking minds, in as far as the external senses are present to our minds as the channels through which they come : farther, it will be allowed as a universal sentiment, that in cognizing such ideas, we do so, as *consciously receiving them, ab externo*, and though we do not see the link of connexion whereby mind and matter are conjoined, yet we have the common assurance that the real objects exist as represented by our ideas.* On this question there is absolute harmony of thought—a harmony which, amid all the changes of human sentiment, stands forth as the universal corroboration of this one conviction, as to the *source* of what are known as our percepts. Persons

* The author feels that he is here occupying ground which has been already traversed ; but there is an expansion of view now given which has not been previously detailed.

will differ in describing the particulars of an object, which has been submitted to their observation ; (and we can account for this through the differences in the observation), but however they may differ as to an observation of details, and therefore as to a description of details, there is under no circumstances, any difference as to the fact, that the ideas which we have of external things come into the mind *ab externo* ; and further, that the object is in reality what it is represented in the mind to be, a substantial outside object, distinguished and known by certain specific qualities. Now, on the plea that after all, the *cognition* of the object is a universal subjectivity, we are apt to forget *the conscious fact*, that this subjectivity, as a universal conviction, has its source outside of us, *i.e.*, comes into the mind from a realism external to us. Apart then from the discovery of the "causal nexus" whereby this conviction is constituted and established in our minds, we are entitled to say that whether we see it or not, there is and must be a *causal nexus*, in as far as we see and act upon this conviction as founded in truth ; and this, on the ground that if this conviction were false, then all our convictions must be false ; and because the whole structure of human thought is built, as we shall see, upon the foundation of our percepts. In these circumstances, were it otherwise, it would follow that our whole life must be a lie—a conclusion which bears absurdity in its very complexion.

We are warranted, therefore, in supposing, nay we are bound to believe, that there must be a *chain of connexion* betwixt the external object and the mind, as conscious of the object ; and the question is, What can that chain be ? and then, In what way are its ope-

rations carried on as a *go-between*, in conveying the facts of matter into the territory of mind? Here, then, we have recourse to a great fact—a fact which heretofore has not been sufficiently regarded—which has indeed been quite overlooked, viz. this, that proof exists, not only that there is everywhere an all-pervading medium invisible to our eyes, and indeed directly insensible to our senses generally, but yet from its effects unmistakably existent and prevalent, in as far as we have warrant that said medium bears on its bosom a representation of the external object—an ectype of the object, delineated from the object, and presenting the characteristics of the object, according to a determinate law, whereby the representation of the object is proportionally diminished as the square of the distance from the object increases. And what we say is that this ethereal medium must be regarded as essentially *spirit-substance*, for reasons already described, as being the endless and simultaneous servitor of all conditions—the servitor not only of those conditions whereby one body of matter is represented *in loco*, and whereby another body and another is also represented *in codem loco*, but also whereby one body is connected with another, and consequently also whereby all varieties of matter are connected with mind.

We proclaim, then, what constitutes the connecting link whereby the facts of the external world are apprehended by our mind: yet this will not easily satisfy all that constitutes for us what Hume called a *causal nexus* between the material object and the thinking mind, unless we are able also to show that there is a naturalness and harmony of junction betwixt this connecting ectype, as I have called it,

which represents the material object, and the mental substance which in us is conscious of apprehending it. In fact, there are two important essentials wanted to be made obvious, in order to set this hitherto knotty question at rest. One is that we shall be able to establish a *sameness in character*, betwixt the representation of the external object, as projected from it in nature, and the receptive subject as acquiring possession of it, and therefore as having a cognisance of it; and the other is that we shall be able to trace the channel throughout whereby this representation is conveyed from the real object to the conscious mind.

Section 3.—How the Mental Ego is Constituted.

There arises here a three-fold consideration, first, the fact of there being a representation of the material object, in the ethereal medium carried to the mind: and second, what is it that constitutes the mental Ego and its relation to said representation: and third, by what circumstances are the two connected? The first consideration then is, what is it that constitutes the mental Ego, and under what circumstances is its foundation laid? Then, it will be our business to see how it operates, and this in its active as well as passive states.

In discovering the origin of the Ego, I have once more to call attention to what I hold is a *universal law* attending all material existences.* It is this, that

* I feel, in prosecuting the exposition of this chapter, particularly as regards the intellectual side of the mind, the necessity so far of treading on ground already gone over; but it is hoped the investigation will be made more complete.

wheresoever there is a material object, there is a counterpart or similitude of that object adumbrated therefrom by a regular law in the Etherial medium, and consequently a similitude of corresponding qualities, spiritous in their consistency and nature. There is, of course, the outward form radiated from the mass or body, but over and above, it is to be noted that there is spiritously the essential quality; and it is to be noted also that one purpose of a nervous system throughout the animal economy is hereby to arouse a consciousness of the essential conditions of the body, as a constitutional personality, in a concentrated form at a *pole of centralization*; and we know that at the base of the skull in man the nervous centres of the bodily system have generally their termini. For example, the spinal cord and axis, the sympathetic nerves, as well as the nerves of the five senses, and many others, meet in or near the *medulla oblongata**

* Dr. Foster, in his text-book on Physiology, says, "the medulla oblongata is the link between the brain and the spinal cord, and the majority of the centres for various organic functions are situated in it. Of the whole brain (he says) certain parts respond easily to stimuli such as the *corpora quadrigemina*, the *crura cerebri*, the *pons Varolli*." Carpenter (Mental Physiology, p. 119, 4th edn.) says, "the sensory ganglia comprehend that assemblage of ganglionic masses at the base of the skull in man, and partly included in the *medulla oblongata* in which the nerves of the special senses (taste, hearing, sight, smell) have their central terminations. With these may be associated the two pairs of ganglionic bodies known as the *Corpora Striata* and the *Thalami Optici* into which may be traced the greater proportion of the fibres that constitute the various strands of the medulla, and which seem to stand in the same kind of relation to the nerves of Touch or common sensation that the Olfactory, Optic, Auditory, and Gustative ganglia bear to their several

and the sensorial ganglia attached thereto have their termini there—what, then, we say is this, that here, at what is generally called the *sensorium*,

nerve trunks." Dr. Ferrier (Functions of the Brain) says, "with the exception of the paths of volitional motor impulse, comparatively little is as yet definitely known regarding the functional significance of the numerous afferent and efferent tracts which connect the *medulla* with the *cerebellum* and cerebral ganglia, or of the specific functions of the various grey centres of the medulla itself. Direct experiment on the medulla is full of difficulties, and the results full of complications. We know much more of the *medulla oblongata* as an independent centre. Should all the eucephalic centres above the medulla be removed, the mutilated organism will continue to live and breathe. The functions depending on the spinal centres will go on automatically, and reflex actions will be called forth in regions innervated by the medulla itself. The eyelids will close if the *conjunctiva* be touched: the tongue, oral and facial muscles, will contract, and the ear twitch in irritation of the sensory nerves, in reflex relation with the movements in question. Occasionally, human infants are born entirely without any cerebral centres above the medulla. Yet such ancephalous infants suck and swallow as well as the perfectly developed child when put to the mother's breast. The medulla is thus a co-ordinating centre of reflex actions essential to the maintenance of life. The destruction of the medulla causes their instant and permanent annihilation."

It cannot be urged that physiology gives us very definite instruction as to the formation of the intellectual Me. Yet we find some interesting facts. There is the fact that a basis of mind exists even if the whole eucephalon should be destroyed, provided the *medulla oblongata* be left entire; and there is the fact that the links of union between the outer senses and intellect are those which terminate in the medulla. Those which refer to Touch are at the base of the brain, but lie within the range of what is called the commune sensorium, which is supposed to cover the *corpora striata* and the *thalami optici* as well as part of the *medulla oblongata*.

there is a transcript or efflux of bodily states fundamentally reflected in spirit-substance, on spirit-substance as now constituted to the soul; and this forms the ethereal or spiritous representative of the bodily constitution, with of course the bias or proclivity which characterizes the material nature; which nature gives birth to what we call disposition in the animal economy. Here, I say, is laid the very foundation of *soul*, as founded on, derived from, and specially conformed to its own animal character; and hereby is formed the basis of a mental self-hood, capable of being enlarged according to the number and variety of inlets with which it happens to be organically supplied by means of the senses and other springs for lodging impressions.

But the question is naturally asked: How comes this subjective Ego, thus derived, to be furnished with the attribute of consciousness—the consciousness of a multiplicity and variety of forms in the one Ego, and developed into Intelligence? If the foundation of this Ego is neither more nor less than a spirit-conformation of bodily states in the Etherial medium, according to the analogy of which we have experience in the objective material sphere, how comes it to pass, that, in this case, we find it displaying an attribute so very remarkable as that of consciousness, of which we have no intimation in the merely physical world? The brief answer to this question is, that in the arrangements of the outer or mere physical world, there is no scope and no possible outlet for the display of subjectivity. In the outer world we have in ether simply the ectype of the material object as a phenomenon, and it either alights or terminates on nothing, or it

comes in contact with the representation of some adjacent object; and thereby manifests its affinity therewith, or it carries the form of the object into some plasma that is receptive of the form, and so fulfils an important purpose, as in the processes of growth; but its end is there fulfilled—fulfilled, in that its capacities are only called to the extent of engendering fresh forms or of carrying its conditions to other conditions. It is different under the cerebral processes, in which it is made to *re-act in itself*, as a constituted self. Here, for the first time in the economy of its various sympathetic action, it has the prerogative for itself, of *receiving and delivering impressions*; AND UNDER THESE CIRCUMSTANCES, there is developed the ultimate and the highest attribute of its nature. This phenomenon of consciousness is universal in the animal economy,* and it opens

* We should have scarcely anticipated that what takes place in the constitution of the mental part of man by natural law, would by philosophers be generally disallowed as correspondingly taking place among the lower animals, in constituting their mental part, the distinction being that the consciousness created in man is an extended consciousness in response to the many inlets supplied by the superior organization of his brain, while the consciousness created in the inferior animal is proportionally narrowed because of its inferior organization. But what do we find? In the "Relations of Mind and Brain," by Professor Calderwood, we have statements to the contrary *passim*. In page 268, he says, "Consciousness is illustrated in the knowledge of a sensation, as a present experience in our own life; it involves knowledge of our own existence, and of the state of that existence at the moment. Further, consciousness belongs so much to the very nature of intelligence, as to imply knowledge that the present experience is not the result of our own effort. It thus supplies the test on which we seek for an

up to us a new philosophy—a philosophy of substance hitherto hidden from us; a new psychology therefore which expounds for us not only the facts of the physical world, but their connection with the facts of the mental world as developed from its indistinct beginnings up to the highest capacities displayed (as we should see) in the intelligence of man: all this

external explanation of present experience. This explanation we find in external excitation, which physiology represents as the conditions of sensori-motor action. Apart from the distinction in consciousness between self and not self, an explanation of sensori-motor activity could not be attempted. The power of comparing things is essential for the interpretation of sensori-motor action, and this power of comparing is the distinguishing characteristic of mind. We may therefore say that consciousness is a function essential to mind. If therefore it is doubtful whether animals possess consciousness, it is doubtful whether they possess mind." Professor Calderwood wants to distinguish betwixt what he calls "*the action of mind*" and "*the action of mechanism*." Why! what is consciousness? Is it not the fact of being *aware*? And does not this fact apply to animals? How could there be fear, courage, joy, sorrow, or any feeling without consciousness? Wherever there is sensation, animals have the consciousness of their sensation. There is, of course, such a thing as reflex action in which we may have no consciousness, because that action is not carried through the brain. We have no consciousness of the flowing of the blood nor ordinarily of the beating of the heart. These come not within our observation. But how there could be sensori-motor action without the consciousness of it is unaccountable, or how the sensori-motor action can be expressed as absent from consciousness we know not. We might quote many passages to the same effect from the volume referred to.

I give but one more, as follows, from page 307, "on the evidence now adduced, we reach the conclusion that the intelligence of man, as known in personal consciousness, is of a nature entirely distinct from the sensory apparatus, its functions being

however, depending on the wonderfully structured conditions and forms of the varied brain-work with which man is endowed—a brain-work, the organization of which in all its parts shows a remarkable adaptation for the fulfilment of its very refined functions.

We shall now come to perceive that there is but one true method of philosophizing, and that is to base our procedure on facts, by a strict process of induction; and if we find a natural and feasible explanation of phenomena hereby, we may rest tolerably certain that we have found the key to open the gates of psychology.

Section 4.—The Faculty of Perception.

It will have been seen ere now, how we come to

incapable of explanation in accordance with the laws of sensory activity. Mind is not a product of cerebral evolution, and could not be so, inasmuch as even in its lowest function it is incapable of being performed by sensory apparatus." If the author means that the material organs of Brain cannot, as from themselves, give forth consciousness, we quite agree with him; but if he means that there is any outcome in the animal economy between sensation and consciousness, we tell him he mistakes. We have defined sensation to be an affection of the bodily system; and whatever results might appear as the effects of reflex action, yet the animal creature would be insensible of it without the consciousness of the sensation: he would be anaesthetic, and in that case we could not speak of the creature as an object of pleasure or of pain. Moreover, the idea of mind operating in man apart from the exercise of Brain is introducing needlessly a difficulty from which there is no outlet, and contrary to the facts of experience. We have seen that the analogy betwixt man and the lower animals is complete, and that consciousness is the phenomenon of the spirit with which the creature comes to be endowed, and according as it is endowed, in virtue of its brain instrumentality.

have a full and (as I think) a satisfactory solution of the great problem of *Perception*.^{*} First of all, we have to remember that there is fundamentally formed in or near the medulla the conscious *Me*, by the birth of a living animal body, and that said conscious *Me* is but fundamentally the etherial, and therefore spiritous, reflex of the characteristics of the living body. In the second place, we have to remember that the several

^{*} As Perception is the cognition of outward objects by means of the external senses, it must be easier under its exercise to find out the locale of intellect than in the deeper departments of mind, where the internal senses are employed, and consequently in which the organization of the *cerebrum* is engaged. What takes place in visual impressions, for example, is carried direct to intellect by means of the optic nerve which terminates in the *medulla*. The *medulla* however is so closely connected with the *optic thalami* and *corpora striata* that these may be regarded as the sensorium. Now the sensorial ganglia are the seat of all consciousness (see Carpenter's Human Physiology, pp. 786, 799, etc., 4th edition). "The sensory ganglia, he says, collectively constitute the sensorium, and may be regarded as the most essential part of the encephalon. They directly receive the nerves proceeding from the organs of special sense, each pair of which has its own distinct ganglionic centre. The sensory ganglia form the organ through whose instrumentality the mind is rendered *conscious* of impressions made on the organs of sense. There is no reason to think that the sensorium has in itself any higher function than that of impressing the consciousness of the individual, and constituting idealism." Again, he says (p. 727) "We may fairly regard the *Thalami optici* as the chief focus of the sensory nerves, and more especially as the ganglionic centre of the nerves of common sensation, which ascend to it from the *medulla oblongata*. On the other hand, the *corpora striata*, which are closely connected with the *Thalami optici* by commissural fibres are implanted in the motor tract of the *crura cerebri*," whereby impressions from the *cerebrum* are delivered to intellect.

senses of the living body, eyes, ears, palate, nostrils, and bodily surface, have separate nerve conduits attached to them, all of which are carried to the self-same spiritous receptaculum corporis. Hence (to take the sense of *sight* as an example), when the impression of a dog, a tree, a house, &c. is carried from the object to the eye, and from the eye to the brain, and as an etherial impression, enters the etherial *Me* as an idea, we have the cognition of it. Similarly, if it be a *sound* passing through the ear, we have a cognition of it;^{*} and so also of impressions in taste, smell, and

^{*} It is said that "the tremor which accompanies sound is a sensible impression, and the difficulty is to understand how the feeling or consciousness called sound is connected with the sensible impression perceived as a tremor of the auditory nerve." The interpretation of this difficulty seems to me to be this: The tremor conveys sound as an impression on the auditory nerve, precisely according to the quality of the organ or instrument in which the tremor is originated; and the sound, whatever may be its kind, falling on the ear, is carried silently as a quality along the nerve attached to the ear, and as a quality is thereby presented to the etherial personality, where the consciousness of the presentation is evoked. Certainly the sound is not given by the mind to itself. We have the analogous case of the telephone. One may speak to another, who is miles distant, by means of this agency, and while the quality of sound is carried silently along the wire, it is developed at the other terminal in all its accuracy. What is the lesson here? It is this; that the qualities that are developed in matter may yet be, and are, mysteriously hidden in Ether. It is out of all reason to suppose that while the auditory nerve feels the vibration, the music is supplied by the mind. The same sort of argument has been used for vision, and assertion is made that the impression of the object on the eye is one thing, but that the nerve cannot convey colour, and hence that colour must be the contribution of the mind. This doctrine is full of

touch. Whatever happens to be the characteristic of the impression externally, that self same characteristic is carried by the nerve to the brain, and as an idea, it is accordingly received by the conscious *Me*. That is whatever happens to be the condition or conditions belonging to the external object, as for example, mineral or metal, solid or liquid, in regard to touch; black, or white, round or square, in regard to sight;—tuneful or harsh, harmonious or discordant in regard to hearing;—fragrant or fetid in regard to smell;—these and other conditions applicable to matter are equally conveyed in spirit-form by the appointed nerve channels, adapted for their respective functions, and are each and all carried to the same central Ego of the living frame; and there is consequently in this conscious self-hood, a specific consciousness of the external world in those details of which each person has had the experience.*

Having ascertained the foundation of mind and the service and process of the great fundamental Faculty of Perception, whereby we are cognisant of the external world, we shall come to see how and in what way the other Faculties of the Mind are framed; and if these are found to be framed on the same satisfactory principles, it becomes tolerably certain that the *a priori* philosophy, as a system of transcendentalism, has no

inconsistencies. We lay down the doctrine that there is not a phenomenon indicated by matter, but finds its quality hidden in, and developed again by Ether in the channel adapted for its transmission.

* It will be noticed that what are called "the forms of thought" by transcendental philosophers, are simply the forms of things in their reality, as transmitted from the external world.

ground whatever to rest upon. If any feature of all the separate mental states can be accounted for on *a posteriori* principles—principles which a sound induction alone can favour, then there ought to arise a new era in our philosophical speculations—an era in which we are no longer shrouded in the mist of cloudy obscurity, or left in the bewilderment of labyrinthine perplexity;* and thus made to stand in a position such, that we know not whence we have come, or whether we are going—a position wherein we are lost in contradiction and mystery.

Section 5.—The Faculties generally.

We come now to the other faculties of mind. Here we have but to consider that, as the various departments of Perception are dependent on the various *external organs*, which are adapted for transmitting the separate conditions of matter, so we must infer that the various phases of Memory, Imagination, Conception, Judgment, Reasoning, &c., are similarly de-

* We get bewildered, for example, in endeavouring to master Kant's critical idealism with his "pure *I*," and his changeable *I*—his transcendental self consciousness, and his empirical consciousness—the *I* of pure psychology, and the *I* as to form or representation; and more confounded still, when told that things in themselves cannot be known—that time and space are mere conditions of thought, that the unconditioned can have no objective reality, that the categories of the understanding are simply forms whereby an object can be known, while his ideas of pure reason are *a priori* principles beyond the possibility of experience. Well might Hamilton describe them as "the production of perverted ingenuity," though he himself got involved in not a few of them.

pendent on a separate framework of *internal organs* as equally adapted to fulfil the results which these separate faculties accomplish. The internal cerebral organization must in the first place contain a general ground or basis for the reception and retention of impressions;* and in the second place must possess a special apparatus of neural framework for the abstraction and reinstatement of these impressions under new

* "The elements of the cerebral substance, the unconscious agents of the manifestation of our psycho-intellectual life, work in silence at the operations which they accomplish in common. They associate together with their manifold properties in one harmonious effort, corresponding with one another by the mysterious channels of their anastomosis; and without our knowledge preserve in their minute organism posthumous prolongations of past impressions. They act simultaneously to produce the phenomena of memory, and separately give off reminiscences, as illuminated bodies give off their luminous waves stored up in their substance." (Luys on the Brain, p. 141). "The organic memory of sensory impressions is the fundamental basis of knowledge. If the sense impressions were evanescent or endowed only so long as the object was present, the range of conscious intelligent action would be limited to the present, and we should have no real knowledge. We can only be said to *know* where we recognize identity or difference between past and present conscious modifications. If we had no organic memory of the past capable of re-excitation, to serve as a basis of comparison, we should be unable to recognize either agreement or difference." (Ferrier on the Brain, p. 428). "It is now very generally accepted by psychologists that any idea which has once passed through the mind may be reproduced at however long an interval through the instrumentality of suggestive action." "It is obviously on this recording of impressions, so that they are reproduced as ideas when the appropriate suggesting strings are pulled, that all our accumulated knowledge depends." (Mental Physiology, Carpenter, p. 429 and 434).

relations, when the affinities by which association works draw them forth.

Physiologists with all their pondering, allow that they are as yet but very imperfectly acquainted with the separate functions performed by the varied organs of the brain. They have done all that has been hitherto possible in probing into the anatomy of this wonderful structure; but we are yet in ignorance save as to a few of its departments, in regard to which they have attained to some general notions as to the precise functions accomplished by specific parts. We may know that the cerebrum has to do with intellectual operations, that the sensorium is the seat when intelligence is developed, and that the cerebellum in all probability has to do with the regulation of physical movements;* we may know that the fibres are for the transmission of impressions, (delicate for their delicate work) and that the cells in the cortical substance, are for lodging impressions; but to say to what purpose the *corpus callosum*, the *pons Varolii*, the *corpora quadrigemina* and others are devoted, cannot be surely understood.† Nor is this to be wondered

* "The cerebellum would seem to be a complex arrangement of individually differentiated centres, which, in associated action, regulate the various muscular adjustments necessary to maintain the equilibrium and steadiness of the body: each tendency to the displacement of the equilibrium round a horizontal, vertical or intermediate axis, acting as a stimulus to the special centre which calls into play the antagonistic or compensatory action." (Ferrier, p. 199).

† The cerebral hemispheres are connected together by a great system of commissural fibre, the corpus callosum which forms the floor of the longitudinal fissure, and roof of the cerebral

at. The whole machinery is conducted so thoroughly in the dark, that a complete insight into the offices performed by the respective organs has not yet been obtained. We are therefore dependent to a large extent on analogy to explain the reflex phenomena of mind, in connexion with the complex organization of cerebral matter with which it stands connected.

(I.)—*Memory.*

The first Faculty of Mind after that of Perception that comes under our review, is undoubtedly that of Memory. Perception is *the cognition of ideas ingathered from the external world*; and the first reflex operation of the infant mind is the recallment of the ideas of Perception, and the *re-cognition* of the ideas as the counterparts of the impressions already known and recalled from the storehouse of memory. For what is memory fundamentally but the storage of impressions; and what are impressions but the imprints on the cellular organs, which imprints are the source of the ethereal forms called ideas, which become the property of the intellectual *me* when carried thither. There is thus a two-fold copy of what constitutes the pabulum of human knowledge—the impressionism lodged in the cortical substance of the brain, and the idealism which constitutes the foundation of the Ego or Me. The Me is properly the soul of the man; and the ideas which it receives constitute the knowledge with

ventricles." (Ferrier, p. 45). The relations of the Pons are very imperfectly determined. The corpora quadrigemina have a relation to the visual centres of the cerebral hemispheres.

which it is equipped. Hence, in the matter of Memory it behoves that in our present constitution there is a *basis of matter* for holding impressions, as well as a *basis of mind* for holding ideas, and when old impressions are returned to the Me it has a *re-cognition* as something already acquired.

In the present constitution of our minds, with a constitution which operates throughout by means of cerebral instrumentality, we are and must be dependent on brain for the efficient working of mind;* because the Me *as an Intelligence* is purely receptive, and is cognisant of ideas, *only when ideas are transmitted to it*. And this explains what has long been the *crux philosophorum*, viz.:—the power of self-insight, as if the eye which sees other things could by any possibility *see itself*, apart from a mirror reflecting it.† The *me* sees and knows itself, not by what has improperly been called introspection, for that is a

* "That the brain is the organ of the mind is a universally admitted axiom. We have no proof of subjectivity or modification of consciousness apart from the action of the cerebral hemispheres. Why consciousness should arise only in co-relation with the activity of the cerebral hemispheres is a question which has not yet received any satisfactory answer." (Ferrier, p. 324). "Nothing can be more certain than that sensational consciousness is excited through physiological instrumentality" (Carpenter's Mental Physiology, p. 12).

† Professor Calderwood, p. 6, mistakes the meaning of introspection when he gives as example of it, the consciousness of our thoughts and feelings. He says the physician does not hesitate to ask his patient how he feels, and he calls his experience introspection. Why! all such experiences are not introspection, but the cognition of affections wrought upon us *ab extra*.

contradiction in terms, in as far as the observer cannot be the object observed, otherwise we confound subject and object. There cannot therefore be an intuition such as that of self looking upon self unless self is somehow mirrored as an object. If, however, we find self cognizing new ideas, and *re-organizing* old ideas: if we find self cognizing ideas of Perception, and ideas of Imagination, and ideas of Conception, and ideas which are the conclusions of Judgment, and ideas which are the inferences of ordinary reasoning: if, moreover, we find that the *me* is conscious of the knowledge which it possesses in the furniture of its ideas, we are hereby able to say what the *me* is, as a spirit-formation, having the capacity of understanding what sort of ideas are introduced to it, and of laying up these ideas in itself, as the separate departments of its knowledge.* Hence the soul is a structure entirely built up in this world in connexion with the body.

(2).—*Imagination.*

The next Faculty which naturally comes before us, is that of Imagination. Imagination differs from Perception, in that Perception is dependent on the

* Hence, observe how we are able to mark the identity of self, whatever accessions it may receive. The identity of a material object is interfered with by the accessions which it receives, because it thereby loses its primitive form and character; but the distinction as applicable to the mental self is this, that each separate set of experiences is preserved therein distinct and inviolate; and we can point to any one set of prior experiences, and fix them as the realities applicable to our individual case.

external world for its ideas, and lays a foundation for the exercise of Imagination. Perception, *first of all*, fills the mind with fundamental ideas; and when we think of the whole process of our education in the world, not only by observation, but by reading in all departments of literature, we might say, that, in Perception we lay up a store of these impressions in the cortical substance of the brain, with their counterpart ideal forms in the spirit-substance of the *me*; and Imagination as well as Memory operates on this foundation;* and in their exercise these lay a farther extension of forms on this foundation. It is out of this foundation that both Memory and Imagination find the supply of their respective materials. But there is this difference betwixt Memory and Imagination, that the former deals with the recurrence of ideas in their integrity: the latter partakes of the recurrence of ideas or of parts of ideas which are first broken up by analysis and built up anew by synthesis into new forms. For example, we may have first of all by Perception received the idea of an orange: the parts of that idea are colour, shape, ruggedness, sapidity, etc. What does Imagination do? It takes any one or more of these parts, and dresses an object of its own of different material, and consistency, and applies its colour to it, and its shape to it, and perhaps the characteristics of something else to it. In this way a

* If Perception does not lay a foundation of pabulum for all the other faculties of the mind, then we must be constrained to suppose that after all, there is a transcendentalism applicable to the human mind, which contributes by itself to human thought; but this is contrary to the whole structure of mind as we have represented it.

fresh picture of things is set up—set up as made of elements all culled out of ingredients which have been primarily obtained from various objects received in the exercise of Perception.

What may be the precise instrumentality of the Brain for the borrowing of certain attributes of concrete ideas, and of building them up into a new picture, as presented in the exercise of Imagination, it is not easy to say; but this much is obvious, that, while Remembrance is the calling up of ideas in their totality, Imagination is the calling up of ideas and such attributes of ideas, as are sought for to constitute some analogy or resemblance.* Attention should be had to the source of this power, in calling up what is wanted from the territory of the stored up material.

It may be asked, by what power are we enabled to summon up old impressions, or parts thereof, to the central formation that is immediately before the mind? The answer no doubt is by Association. But what is Association? It is neither more nor less than the operation of Affinity between an impression before the mind *in a state of want*, and an impression in the store-house which *supplies that want*.† Such is the exceedingly delicate refinement of operations in the cerebral system, that the intercourse betwixt a subject

* "The faculty of Imagination works within the same limits as Recollection." See illustrations in Carpenter's Mental Physiology, chapter xii.

† Every separate impression has its own distinctive quality; and it is in virtue of the special condition attached to each, that the law of affinity is found to operate with such unfailing accuracy, thereby enabling association to fulfil the most important functions in the exercise of mind.

before the mind and the objects laid up in the framework of impressions, that the felt necessities of the subject or impression as the idea before the mind, are responded to as by attraction, to complete some analogy or picture sought to be drawn into the combination. Hence, it happens that, when one has had considerable experience of the practical affairs of life, he may by help of these varied impressions revel in manipulating fresh pictures for himself, by making up analogous scenes. This is the work of Imagination; and it is carried on by means of the material organization of the brain, adapted to fulfil such a purpose.

(3.)—Conception.

But we have another great Faculty of the Mind known as Conception. Conception is that Faculty which betokens genius: it is the faculty which is employed when we are met by difficulties, and which aids us in overcoming difficulties. It is this faculty which indicates resources—the power of originality in fulfilling some purpose of the mind—the faculty therefore which is brought into play in the exercise of invention. In employing conception there must always be a purpose before the mind. A purpose is what Kant calls a *schema*—a form of thought, expressing something that has to be adopted, but wanting in some element which must be supplied to it, before it can be carried out—before the end can be realized. The instrumentality of brain equipped for this service must be such as to carry with it the impress of *a certain condition in want*, and therefore having a craving for a particular supply adapted to it; and

not only this, but it must have scope afforded to it of feeling its way among the stored up impressions for the article wanted; and if there is failure in finding this, the mind is said to be baffled in overcoming the difficulty before it, that is in accomplishing the purpose sought to be realised. It is obvious that success in the exercise of Conception, as well as of Imagination, must chiefly depend on two things, first, on the varied store of laid-up impressions; and second, on the refinement of the nerve-fibre in laying hold of the desiderated form, which answers to its want. While Perception, Memory, and Imagination also so far belong to the lower animals, it does not appear that they are gifted with the faculty of Conception, in so far as no such thing as a *schema* to be filled up comes before their mind, unless it be in such isolated cases as the bird in building its nest, or the bee in furnishing its hive, or the mother in providing for her young; and these cases are properly denominated Instinct.* Instinct may be called *an exercise of*

* The reason why the lower animals want the faculty of Conception save in such isolated cases as have been referred to, lies in this, that they have not the power of apprehending the relations of the *not-me*. Hence, their attitude to these relations is that of blindness: hence, therefore, the narrow sphere to which they are confined—the sphere which alone concerns self. And hence, their movements are influenced so far only as outward circumstances pertain to self. As *not-self* opens up indefinitely the objects of the world, and their relations to one another, and as man has a sight of these relations especially as these are conjoined for the fulfilment of a purpose, it is obvious that the Reason of man is hereby indefinitely expanded in the adaptation of things to one another. It has moreover to be noted that this pre-eminent power of man,

Reason confined to one particular department. Reason is the power of adapting one thing to another *generally* in the accomplishment of a purpose. Hence, Conception may properly enough be regarded as the fundamental faculty, in which Reason or *the power of adaptation* operates as the agent in the exercise of human purposes.

(4.)—*The Reasoning Faculties—(a) Judgment.*

But there are other aspects of Reason constantly predominating in the human mind, that is in drawing Inferences or in forming conclusions. And without doubt there must be an apparatus in the Brain adapted for the accomplishment of all this. *All inferences are obtained by comparing one thing with another*; one of these is called the major premiss, and the other is called the minor premiss—the former must have been acquired in the course of experience, the latter is the object whose character has to be ascertained, and before a comparison can be made betwixt the one and the other, the two must be cognate, that is analogous objects, with this difference, that the former which is embraced in our experience stands as the best of its kind; and the character of the object comes out according as it comes near to it as the standard of excellence. That is, the major premiss stands before the mind, as a standard of excellence or criterion whereby we form our Judgment; and the correctness of the Judgment must always depend on the accuracy

in apprehending the relations of the *not-me*, must be ascribed to a peculiar quality of brain with which he is gifted.

or sufficiency of what may be called our standard of measurement. What the precise form of organ is in which our standard ideals are registered, we cannot say; and what the precise form of organ whereby a fresh cognate idea is applied, we cannot say, farther than that there is in connection with Brain-organization a grand Register-Department of our experiences; and in order to obtain the judgment required with reference to some object brought before the mind, there is the summoning, by association, of the correlative subject which contains the required inference to be appended.*

(b.)—Reasoning.

Such is the process in the exercise of Judgment whereby we are *able to indicate character* as applicable to objects. Somewhat analogous is the process which has to be gone through in what is commonly called Reasoning. Reasoning is spoken of as having two great branches, that of *Induction* and that of *Deduction*; but the process in either case is strictly the

* We search in vain through treatises on Physiology to find any clue to the process of brain operation in making the comparison of an object which has just entered into the mind, with an object already laid up in the mind. In the exercise of judgment the process is ordinarily automatic, and the pronouncement of the *character* of that which is presented to us seems in certain cases to be immediate. It appears as if in cognate matters the topography of analogous cases were determined, and that when a representation enters the *optic thalamus*, it is at once confronted by another con-similar, in virtue of which we have an immediate intuition of difference, and thereby an exercise of judgment.

same, the distinction being that in Induction we have in possession the major premiss containing what we call a *Cause*, and, therefore, we seek and obtain, through this an inference which constitutes the *Cause* as adequate to account for the conclusion in the minor premiss; while in Deduction we require to have the major premiss as containing the *conclusion* we seek for; and therefore we seek through this an inference which constitutes the *Conclusion*, adequate to satisfy the *Cause* in the minor premiss. Here, as in the exercise of Judgment, there is a comparison betwixt two cognate objects, one of them being the minor premiss, or that to which we wish to attach an inference, the other being the major premiss as something laid up in the storehouse of impressions, and brought forward by association as containing the inference required, whether by Induction in searching for a Cause, or by Deduction in order to find a Conclusion.*

* The exercise of Reasoning is one of the most perplexing to the student of mind. It is made obvious that it takes place by comparing one representation with another. How that can be effected by any specific organ defeats us to understand: yet upon the plea that like is drawn to like, the process becomes understandable enough. We have in our experience that representation which we have gathered as *the best of its kind*, and when a cognate image is presented, and confronted therewith we are able at once to pronounce on said image according as it comes near to the model with which it is compared. This is the exercise of *judgment*. Again, we have in our experience a subject to which *the cause and consequence are attached*: when, therefore, a cognate subject comes to the *optic thalamus* with the same consequence, we find it confronted with the subject of our experience to which the *cause* is attached, and we draw thence *the cause* which we seek for. This we call Induction.

(5.)—*Brief Recapitulation.*

Such is a resume of the Intellectual Faculties of the human mind: so-called, not because any use of them can be exercised apart from the cerebral instrumentality through which the mind operates, but because said Faculties stand preliminary to, and are essential to, the operation of these motor Faculties which have their outlet under the title of Appetites and Desires, and what is called Will-power which is carried into execution by our volitions. The intellectual Faculties present different phases of understanding. For example, Perception is *the ideation of external things*, which come to us in seeing, hearing, touching, etc.: Memory is *the recallment to consciousness of ideas formerly entertained*: Imagination is *the groping together by generalization of ideas and parts of ideas* through preliminary abstraction, and hence pictures which gratify the fancy, or illustrate some principle for which we contend: Conception is *an extension of Imagination* into the deep recesses of brain, in order to find means to ends, by the inventive or creative processes of the mind, when projecting or purposing new schemes of action. The Faculties of Judgment and of Reasoning are analogous in that *they depend on the comparison of a presented idea with a cognate idea already laid up*, the difference in the case of Judgment being that we have to pronounce on the

The process is precisely the same in Deduction. When we have a subject with its cause given in the presentation, and have it confronted with a cognate subject and cause, already laid up with the *conclusion* attached, we are able to read off this conclusion accordingly, as that which we seek for.

character of the presented idea; and in the case of Reasoning that we have to *find out a cause or a consequence* to the presented idea, according as one or other is required. And further, in the case of Judgment, the standard laid up is to be regarded as the *best of its kind*; and in the case of Reasoning *the similitude must contain the inference* sought for.

Such are the extremely simple methods whereby we are enabled to expound the most difficult processes of human thought. It indicates an extraordinary delicacy and refinement of the wonderful operation of Association in the field of relationships, and of the Affinities which subsist under these relationships. Under whatever mode of exposition we adopt, these delicate affinities shew themselves, and introduce fresh movements accordingly. And we can have no doubt that in the world of Spirits so-called, it is in virtue of the affinities pertaining to spirit-forms, that their relation (the relation of separate conditions) to one another is disclosed, and their correspondent action accounted for. We have but one source of movement made known to us, and that one source is the operation of affinity under conjoint relationships. It is under these relationships that we account for the exercise of Will-power, to which we shall now give our attention. The material instrumentality by means of which our minds presently operate, can be regarded as simply a crass, or if we like better a gross expression of what is more refinedly manifested in the spirit world. What we say is, that it is through such agency (the agency of conditioned forms), that we have the basis laid of the Ego itself, and through such agency that we account for all the operations of mind.

Having dealt with the INTELLECTUAL POWERS, I now proceed to consider

II.—THE EMOTIONAL POWERS.

(1.)—*Motives.*

In prosecuting this theme we shall have to deal with the great questions of Will and of the Freedom of Will, each of them a *crux*, in the philosophic systems hitherto in vogue. It is unquestionably the Ego (the Me, the conscious-self) that wills. The first question naturally is, under what circumstances is the Will originated, and how comes it to be exercised? There must be a cause. We cannot imagine an absolute self commencement as the cause of Will, for that would be a cause without a cause;* nor can we suppose a movement having a certain direction, to deviate into a contrary direction without an impelling

* And yet there must be a Cause which is itself without a cause. And here is the distinction which we have to make. The absolute Cause is *the self-contained expression* of essential causality in eternal existence—that existence which cannot but be—that existence which is not only the source of all derived being, but which is the fundamental expression of combined conditions as the necessary source of all derived phenomena. That existence, if we consider it aright has in itself the conditions out of which all movement comes; and if we would regard it aright, must have intellectually and morally the best conditions that instigate movement, with entire control over that movement. It is different with respect to derived conditions. For example, if there is aught that stands by itself essentially passive without connexion with other conditions, then it is utterly impossible to conceive that passivity of itself becoming essentially active.

cause. If the Me then is in itself intrinsically passive, as being simply receptive, and therefore conscious of impressions received; and if the Will, as the active impulsion of the Me, is to be regarded, and must be regarded, as an effect; we ask naturally what is the operating cause by which this effect is produced, or out of which it arises? I answer at once:—*Will is created by the introduction of ideas into the Me.* How so? Let it be noted that the Me, while it is etherially a representation of the body, is additionally a structure of ideas through the senses: we have therefore only to remember that the condition of the Me, on the one hand, as for the time cognitoned, and the condition and character of the ideas which are carried to it, on the other hand, *create an emotion or motive power*, in precise correspondence with the kind of affection hereby produced upon the Me. Or, shall I say, it is by the junction of the idea with the Me, that a characteristic emotion is excited? There is without doubt such a phenomenon as an operative chemistry in the spirit-sphere, as unquestionably there is an operative chemistry in the matter-sphere; and when we come to know more of the relations of spirit-conditions to one another, and the refined and delicate affinities of these to one another, this conclusion will be simple enough, and be seen to be amply illustrated and confirmed in mental exercises.

As emotion, then, is the motive power whereby Will is engendered, it is of enormous moment to understand under what circumstances motive power for this end is created in the human mind. I have said that emotions may be indefinitely varied; and they are so varied according to the specific qualities of the ideas

that are brought to bear upon the Me; and not only so, but varied also according to the temperament in which the Me happens to be situated at the time. The process has its direct analogy in the world of matter, as when an alkali and an acid are conjoined. It may be that an idea, when conveyed to the mind (that is to the conscious Me), creates simply an emotion which is properly denominated a sensation, which may be strong or weak, as when we see a man walking on a rope raised aloft, or when he hears of some accident in a distant land, which little affects him, or when a piece of ordinary intelligence is communicated to him. But if the idea introduced to the mind be an intimation of the death of one's dear friend, a man is affected according to the quality of the relationship. And here comes in the operation of Will under Emotion. If the emotion be that arising from the death of a father or near relation, there will be the accession of an idea craving for the supply of a want to be fulfilled. In short, when the idea introduced involves a condition of need in the object, or in the circumstantial of the object, then that very condition engenders the operation of Will, that is a tendency in the Me to relieve the need. If a man is seen to fall from a height, or if there is the knowledge of an object in danger or in distress, or in any special need which our aid can supply, an emotion of desire to rescue or relieve him is at once instigated by the very communication of the idea; and this according to the nature of the want which the idea involves.

(2.)—*Appetites and Desires.*

It is to be observed that the law which generates

Will, applies to Appetites and Desires. *Appetites* have their origin in purely bodily states; these states are well known. Hunger and thirst are bodily cravings, and they are stimulated by the sight of that which responds to their cravings; or they may be stimulated by the presence of that which peculiarly gratifies or brings pleasure in the use of them. The sexual appetite in like manner is aroused by the presence or even the imagination of that which gratifies it. And what is it all, but that impulse of the *Me*, which in itself is strong Will for indulgence. The circumstances under which the Will of Appetite is frustrated, are readily apprehended, as when inappropriateness or when moral sentiment interposes. These will be noticed by and by.

Desires have by many philosophers been described as something definite and determinate in their number and character; but this is a mistaken view. There is nothing more indefinite than our desires, because these arise out of the idiosyncrasy or disposition of the individual, according to his means and opportunities. Desires, then, are endless in their nature, as circumstances happen to generate particular wishes. The sight of an object, or even the apprehension of it in imagination, may excite an emotion for the gratification, especially if there be any natural proclivity towards it. For example, let a man who is fond of golf, chess, cards, &c. have a proposal made to him to play thereat, the emotion which constitutes the will thereto is at once aroused, if circumstances are otherwise favourable for the exercise; and *vice versa*, there will be a repudiation of the proposal, if there be no taste tendency or inclination for joining in the game.

We see, then, what is the source and foundation of Will, in what may be regarded as mere animal desires ; that is of Will in regard to which there is the natural excitement of the moment, that is of Will, which as a matter of course would have its impulse gratified, were there no mechanical or other obstacle as a necessary interposition standing in the way. It is obvious, that in this case, sensuous Will is that spontaneous operation of the Me which is created by the entrance of the causal idea as carnal, which prompts it in the mind. It is the mere phenomenon of law, as displayed by the automatic impulse arising from the combination of two distinctive qualities ; and it arises in the Me as particularly conditioned on the one hand by its special consciousness at the time ; and as it is affected on the other hand by the particular idea thrust upon it.

(3.)—*The Counteraction of Motives.*

So far as we have proceeded, we have seen that Will is not only an effect, but in what manner it is an effect. Like all other effects, *it is the result of at least two combining properties* creating an emotion, or what we ordinarily call a motive ; and we shall farther see that *there is no such thing as Will without a motive*. But now we come to see how one emotion may counteract another ; or, shall I say, how one Will goes to restrain another, in what we regard as the mere animal intelligence. If we set food before a hungry dog, the impulse seizes him to lay hold of it, that he may have his appetite satisfied ; but if at the same moment we hold a cudgel over his head, threatening

to apply it, if he do but touch the food, he will be restrained. The emotion, created by the sight of the stick, obstructs and overcomes the emotion created by the sight of the food. The same kind of motive power may be seen in man, as when a thief is restrained from stealing, when the eye of a detective is upon him, through whom he would be visited with punishment.

But man, by means of the wider range of his apprehension, has the prerogative of ultroneously curbing his sensuous Will, as when their happens to intervene the presence of a restraining idea :—a restraining idea (be it observed) arising out of the very presence and operation of the sensuous Will in question. It may be asked, How does this come about ? The answer is by observing the effect likely to be produced, if the sensuous Will be gratified. For example, there may be set before a man food very savoury, and for which he has a natural craving, as being very gratifying to the taste, and therefore creating a desire to partake of it when presented ; but in the very circumstances there arises a sentiment that said food is injurious to his constitution ; and this idea (that of the injury to self) operates restraint upon the sensuous emotions, just as the threatened blow on the dog's head operates to restrain him from the dish.

(4.)—*The Foundation of Morals and the Law of Morals.*

There is a general source, whence a restraining idea proceeds in order to counteract the sensuous Will. We know that the *law of Morals* is constantly at work in this sphere of action, and its operation is seen

in the application of incidents to others as well as to self. It is, therefore, of essential moment that this knotty question of morals should be fairly analyzed, and that the source of its operation should be clearly and satisfactorily traced and determined. Whence then comes, and how comes, the restraining idea in morals? The answer is—from a *Moral Idea*. But what is a Moral Idea? I answer a moral idea is *one which affects the well-being of a sentient creature*, that is a creature susceptible of pleasure or of pain. Every animal having the attribute of consciousness is capable of pleasure and of pain; and moreover every animal, as naturally endowed with its own inherent constitution, has what may be called its *God-given rights*, as the attributes essentially belonging to its tribe.

Now, *the fundamental rule of moral law is to respect those rights*—the rights that are the essential prerogatives of the creature's very existence; and these rights are to be regarded as sacred in proportion to the scale of elevation in which the creature happens to be placed. Hence, there exists of necessity a line of moral gradations. We should say the rights of no creature are to be unnecessarily disturbed, *i.e.*, if there be no good motive or inducement thereto. But when the requirements of the higher nature demand that those of the inferior creature shall be sacrificed, if the latter stand in the way of the former, it is expedient therefore that the inferior creature must give place for the sake of the superior. In the same sense, what would be regarded as maiming and cutting of the animal frame, a thing immoral in itself, must yet in the circumstances be regarded as highly moral, if it

subverses the end of removing worse ailments. Abstractly *an inanimate object has in itself no rights*. Whatever may happen to be its characteristics, these exist as mere property for the use of the animal creature endowed with consciousness, and more especially for man, the highest specimen of beinghood upon the earth. Hence, one may mow down grass, pluck flowers, cut down trees, or hew rocks, to serve his purpose, so far as he happens to be proprietor of these. There is no infringement of moral law so far as the things themselves are concerned. But if the things interfered with belong to another person we cannot appropriate them without affecting him, and we may not invade *his rights*. The superior rights of the *general community* may, however, in certain circumstances demand this infringement, in as far as a community are of more importance than the individual, and then legislative authority may intervene for this end.

(5.)—*The Moral Idea the root of Moral Law.*

It is observable, then, that the foundation of moral law lies in the maxim, *suum cuique tribuito*: allow to every sentient creature its own inherent rights; and this implies that we should do injury to none beyond what a higher moral law demands. We are in a situation now to see how and under what circumstances a moral idea comes in with a restraining emotion to check or to suppress a sensuous emotion which otherwise would become Will.

We have seen that the introduction of an idea to the *Me* raises an emotion in the *Me* precisely corres-

ponding to the relation of that idea to the Me, and thereby constituting what is the foundation of specific Will. It happens in these circumstances, that when a sensuous emotion for Will is apprehended or regarded as a Volition, which must affect either self or any other sentient creature, then this *very apprehension is the introduction of a moral idea*; and there immediately arises a moral emotion, an emotion of approval or disapproval as regards the volition in question—an emotion which restrains the sensuous Will, if the sensuous Will is regarded as a wrong done; but of justification, if the deed is regarded as appropriate or helpful to the creature.

(6.)—*Human Responsibility.*

We see, then, what is the foundation of the *ought* and of the *ought not*. If a wrong is done to the rights of another, or if it is seen being done to the rights of another, by fulfilling a certain action, a restraining emotion of *ought not* comes into play, unless the demands of a higher moral law come in to over-ride the same. The sight of a beautiful flower might induce me to pluck it and appropriate it; and if in no man's land, this might be done without offence to any; but if said flower happened to be in the garden of another man, the very fact of *his* ownership must restrain me from taking it, unless I have his consent or authority to do so. The amputation of a limb would, in need-less circumstances, be a wrong on the sentient creature; but if the limb were diseased, and threatened the ruin of its possessor, the act would be regarded as a boon conferred upon him and therefore highly moral. What

then, we say is this, that man, being endowed with the prerogative of seeing the right, or (as the case may be) the wrong, of an action, before the action is fulfilled, hath every where in his vocabulary the *ought* or the *ought not* brought before him as the expression of the emotion aroused. And what I now call special attention to, is this, that said emotion becomes properly *the judgment of his Reason*, and he feels himself responsible as to the action which he pursues.

No doubt the confession of the ancient poet has often to be made *video meliora proboque deteriora sequor*. But this fact (the fact of an evil tendency in one's heart) cannot alter the responsibility. It must be sufficient that a man has before him two ways, and the power and freedom of taking the one or the other, after he has seen the consequences in either case; for then his choice is that he embraces the consequences of the alternative which he adopts. It may be said that for the moment he is blind to consequences, and is influenced by an over-ruling passion. All that can be said in these circumstances is that he is in an abnormal state. An abnormal state is out of the category of reason. It is a state of passion. Passion will prevail for a time and will blind a man, who has not learned to regulate his emotions in conformity with moral law.* David, under the spell of Bath-

* It has been said "A man with a criminal nature and education under given circumstances of temptation, can no more help committing crime, than he could help having a headache under certain conditions of brain and stomach. Both the crime and the headache result from a series of antecedent causes, culminating in their effects. The man inherits his brain as

sheba, became blind to the rights of Uriah. But there comes a time when passion being ended or arrested, there arises a sight and a sense of the wrong done, and *the moral judgment* pronounces the deed as evil, and the man says, "I have sinned against the Lord." Then it is that under an apprehension of the evil, a discipline may be applied for restoration to greater moral strength for resistance in time to come, when a fresh paroxysm of craving returns.

(7.)—*A higher Law than that of mere morals creates Religion.*

We ought not to forget that under the Christian economy there comes into the *Me* for operation a still higher presentation than that of any merely moral idea, in that it is received as coming from God, an authoritative presentation which occasions the strongest and most powerful emotion possible in inducing the exercise of the Will, that is beyond any and all other ideas, and which is therefore properly the highest law of mind in the circumstances. If we believe that certain maxims or principles come from God, and if we regard God as the highest and most authoritative of all beings, and if we believe our accountability to

much as he inherits his estate." (Cotter Morison, p. 289). This is granted; but the two cases of headache and crime are certainly not analagous. The headache will arise from physical conditions, and will not be modified by the presence of others: the crime can be and is controlled and restrained in the presence of others, shewing that *there is a power of restraining the Will in the matter of crime*. We cannot suspend a headache, but villains can and do suspend a crime.

God, it is obvious that in this we have the very foundation of what is strictly known as *Religion*. There has been much discussion among philosophers as to the real source of the religious principle in the human mind. We have no hesitation in saying that it lies in a belief in God,—in the belief of a certain invisible Power to whom we are amenable. If we could get rid of all faith in such a Being, this very fact would do away with the religious feeling. Religious feeling is neither more nor less than the feeling of being bound in responsibility to the demands of some supposed Supreme Authority, under hope of reward for obedience, or under pain of punishment inflicted by him for disobedience. Whatever, therefore, happens to be the faith which we entertain respecting the God whom we own and acknowledge, in precise conformity thereto will be the religion which we cherish. Without God, the reign of moral law would alone be that which would characterize us, and this under circumstances in which it would be terribly contravened by carnal proclivities. In a savage state it is the most natural thing for man to entertain the notion of an unseen authoritative Being. They see around them what they cannot but regard as effects, and they ascribe the effects to some great Cause. The sun and the moon send forth light and heat: they rise and set: again, the winds and waves, the clouds and showers, and a hundred things besides, are regarded as effects, and must have causes; and hence the natural conclusion, that there must be a Supreme unseen Power over the operations of nature: whatever demands therefore are ascribed as the requirement of this Superior Power, have naturally the strongest efficacy

in creating an emotion influential above all others. Hence, ideas which are believed to be from God, are held to over-rule every other consideration. Moral law would tell us that it is cruel to slaughter needlessly a living creature; but if the idea prevails that this is demanded as a sacrifice to please God, moral law is made to yield to the Divine Law; and this because of the tremendous sanctions by which the Divine behests are attended.

It may be said that practically under Christianity, in which the element of Divine teaching is peculiarly and strictly enforced, the lower and sensuous Will is notwithstanding frequently the prevailing one. This must be admitted: it must be admitted that there is constant transgression of laws which are believed to be expressly from God. How is this to be explained? No doubt chiefly on the ground of the immediate imperativeness of the carnal law; but there is more, it is to be explained partly on the ground of the weakness of our faith, and partly on the ground of our belief in an escape from punishment. If, for example, the doctrine is implicitly entertained that Jesus Christ has been substituted for us, and hath suffered the punishment due for our sins, we are fain to cling to the principle that a righteous Being will not inflict punishment twice, that is upon *us*, as well as upon our *Substitute*. Moreover, there is also the less impulse to put a check upon our passions, if it is taught that our so doing is not to be reckoned an ingredient of our acceptance with God. It is a matter of profound regret that such teaching should prevail in the church of Christ—a teaching whose tendency is to lead to such laxity in the discipline of our passions.

(8).—*The Freedom of the Will under imperative Laws.*

But here comes in one of the most puzzling problems which any philosopher has had to encounter, and which amid all the varied resources of human investigation has never yet been fairly grappled with, much less solved, viz., the freedom of human willing, in consistency with the undoubted fact that human willing is itself a result of antecedent causation. It is allowed that there is not a single example of the exercise of Will, but we can trace the same to the play of preliminary elements upon the mind, and that therefore we can always trace the same as arising out of this combination of ideas operating on the Me. How then, it is asked, can the Will be regarded as free? * This has

* It would be an almost endless task to quote the many authors who have insisted in the doctrine of necessity in regard to the Will. I quote two specimens of the argumentation employed. "It is strange to see how some who confidently come to base their argument for the existence of a God on the ground that everything in nature must have a cause, are content in their zeal for Free Will to speak of the Will as if it were self-determined and had no cause. As thus vulgarly used, the term Will has no definite meaning, and certainly is not applicable to any concrete reality in nature, when in the matter of Will, as in every other matter, we perceive effect witnessing to cause, and varying according as the cause varies." In this statement, Dr. Maudesley is right. But he goes on to say, "It would be vain to pretend to throw any sure light upon a subject which has been discussed over and over again, and the opponents on each side convinced that they have gained the day. The question is one which will not be settled by controversy, but by the progress of human knowledge, the time being probably not far distant when men will wonder that so much subtle ingenuity

This has been, and still is the chief stumbling block—the *crux philosophorum*. It is allowed, moreover, that we have the consciousness of freedom; but when this consciousness comes to be analyzed, we are told it must after all be regarded as a delusion. If a delusion, it is a most inexplicable delusion; for in the first place, every rational man, without exception, has this consciousness; and because he has this consciousness, he feels his responsibility; and explain it how we may, he feels that he is not a mere automaton, that is, a thing moved only when a power external to itself pushes it on. A man feels that he can determine as he pleases, that he can make choice as he pleases, and that he is responsible for the choice he makes; and yet his philosophic friend tells him that when he makes his choice, and determines in one way rather than another, he is prompted thereto by some impulse which influences the Will to determine in one direction rather than in another. Is it come to this, then, after

and zealous labour should have been bestowed upon it." (*Physiology of Mind*, p. 409).

"Man is a product of nature in body and mind. Hence, not merely what he is, but also what he does, wills, feels, and thinks, depends upon the same natural necessity as the whole structure of the world. Only a superficial observation of human existence could lead to the conclusion, that the actions of nations and individuals were the result of a perfectly Free Will. Human liberty of which all boast (says Spinoza) consists solely in this, that a man is conscious of his Will, and unconscious of the causes by which it is determined." (*Büchner's Force and Matter*, p. 239). It is one of the most curious exemplifications of non-observation that it should have escaped philosophers that what has been called the self-determination of Will is only a question of Judgment.

all, that reason and logic must disallow the truth of this feeling—the feeling of a conscious freedom? It may be thought that after so much vain warfare, there is now no way out of the dilemma, and that the problem is insoluble.

Let us yet more closely examine this *vexata questio* of Freedom. It is allowed—it must be allowed—that Will as such, in all cases is an effect, and that we can point to the cause, in that it is brought about by the contact of an idea with the Me; out of which contact arises an emotion or motive which is the source of Will. There is no such thing as Will without a motive, and in all cases a motive is the impulse or craving which arises from the circumstances in which we may happen to be placed. It may be thought by this admission that we necessarily give up the whole question, because it is nothing less than a contradiction in terms to say that the Will cannot be *free*, and at the same time the *puppet* of extraneous movements. The matter requires yet closer consideration in coming to our conclusion.

Taking such an example as the very common one of an impulse on the carnal side, and a restraining impulse on the moral side, or on the Christian side, how does the Me stand with respect to both? Does it not properly become a matter of *Judgment*, as to which of the two is *best for the Me*? In all normal action this is the case; and I hold that it is this very consideration that creates the responsibility. There may be a strong impulse on the carnal side, to give way to the craving; but that the Me is not a mere puppet under the craving is manifested by the fact that, when persons are present, before whom it would

be unbecoming or improper to give way to it, it can be resisted ; and that the real situation of the Me before two or more competing claims is first to JUDGE which of the two is most suitable and most profitable, that is most desirable on the whole, to be adopted. IT IS NOT THE WILL THEREFORE WHICH CHOSE, when there is an alternative before the Me, BUT THE ME ITSELF IN THE EXERCISE OF JUDGMENT, which pronounces, and through this shows a preferential attribute for the one impulse rather than the other. I do not say that the Judgment, in weighing probabilities, will always come to a wise conclusion. The wisdom or non-wisdom in willing does not enter into the consideration. What enters into the consideration is, that when there is a competition of claims before the mind, it is the Me itself that *pronounces on the character of the conclusion*, and hence the responsibility of the Me in favouring the conclusion, which the Me prefers ; and hence the Will follows. Let it be seen then, that *in all cases of self-determination, the Will operates through the exercise of Judgment*. If we prosecute the inquiry respecting any case, in which there is an alternative course of action, and if we demand why the determination of the Me, has a preference of the one over the other, I have to say that in all normal cases, this arises in the exercise of Judgment, which pronounces on what it likes as most desirable ; and *this Judgment constitutes the free attitude of the Me*, as to the character of these contending claims, and consequently this free preference forms the source of the movement of the Will in favour of that claim for which the decision is given. It will be seen therefore, in cases of what is called self-determi-

nation that *Judgment is the servitor of the Will*. It is that attitude of the Ego which pronounces on character, and which therefore induces a choice betwixt two or more objects. Hence, it is the arbitrament or determination for which the Ego is responsible. It will be observed, then, that while Will in all ordinary cases is the *effect* arising from the emotion created under the prevailing idea which enters the Me, in all cases where there has been what is improperly termed the determination of the Will, as between two contending claims, the element of freedom comes in, when, under the exercise of Judgment, the Me gives a preference for one such rather than another. In these circumstances the exercise of Will is the free volition of the Me as giving preference to one impulse rather than another. This Will is the decision of Judgment, and Judgment is an exercise of the Reason,—that exercise which, in a matter of this sort, *accords* best with the condition of the Me, as most satisfactory to it.

(9.)—*The Circumstances under which Freedom Prevails.*

Have we then untied this gordian knot of Free-Will ? Of course, if there be no alternative before the mind, there can properly be no exercise of Judgment, and therefore we cannot speak of freedom, because in the circumstances there is no choice ; but when there is an alternative, Judgment rightly or wrongly pronounces in behalf of one in preference to the other. Here, then, I detect, and here I proclaim, the law of human freedom ! Liberty is simply the power of the Me when confronted with two or more ideas for adoption, to judge which is the preferable, and to pro-

nounce in favour of one or other of them, in order to the exercise of Will. The claim has been misapprehended as that of the Will, but *the will cannot choose*: Will is the result of choice in this case; and here it is that the endless confusion, distraction, misunderstanding, and misrepresentation have arisen. The free intellectual pronouncement of the Me in the exercise of Judgment, I repeat, simply defines the attitude of the Me to the proffered objects, and this very attribute connects the Me by association with that which is pronounced to be best, and hence the operation of Will is but the self-movement of the Me to that object which Judgment presents to it.

It will be seen, then, that, in all cases where there is presented two or more ideas before the mind, whether in the sensuous department, or in the moral department, or what may be called the spiritual department, there is a sense of responsibility because there is a feeling of freedom. The feeling of freedom may be very different in different circumstances. We are all familiar with the case when there may be no bias in the mind in favour of one item more than another, and when the Judgment is undecided in its conclusions. There may be a number of candidates for an appointment: in that case the Me has to be informed as to the fitness of each; and then a pronouncement of superior fitness being made by the Judgment in favour of one, the Me is drawn to that one; and it *wills* accordingly. Or there may be a variety of patterns of paper set before the Me for choice to cover the walls of a room: Judgment in like manner brings these to the standard of taste which happens to exist in the mind; and,

accordingly, that which comes nearest to this standard is fixed upon: and the Will operates accordingly. In morals the self same process exists. An honest man will not rob his master, though he may have the opportunity, because of the injury which the robbery might inflict not only on his master but on his own self-respect. He may be in want of the money; but as one paying more respect to the law of morals than to the sensuous craving, he pronounces for the *ought-not*, and therefore the Me wills for restraint. Another not so refined in moral honesty, may be induced to take the opportunity of appropriating to himself what is not his own; but here, as in the former case, it is still a matter of judgment, in as far as the man shuts out the moral impulse as weak, and is the slave of what would satisfy the covetous nature. Take a case in which a man is supposed to be taught his duty by God. Joseph in the hour of temptation judged it to be wrong to yield to it, because in direct contravention of the command of God; David, on the contrary, gave way to it. How is this explained? It may be explained that in the latter case there was very little room permitted for the exercise of Judgment; the overweaning power of the passion blameably repelling the employment of calm Judgment, the strength and imperativeness of the passion for the moment shutting out all other considerations. But then, David could scarcely be said to have lost his freedom, in as far as there were many conceivable circumstances in which he would have restrained himself. In fact, whatever his bias or passion was, his freedom lay in pleasing himself. See how Annanias was found fault with in the conduct which he practiced in the selling

of his land. His desire was great to stand well with the church, as one giving up all, and thus to gain credit for his self-devotion in giving up his all for the common good ; at the same time he had personally and privately another and equally strong desire, viz., to be the possessor of means apart from his share in the common stock. How was he to gratify *both* propensities ? It could only be by preferring to utter falsehood. We have heard of a banker who gave largely of his means to christian charities, and to the schemes of the church, for the propagation of the gospel, and who at the same time was guilty of forgery and doing other deeds of villany. His freedom of Will lay in the fact that this species of character pleased him—that it pleased him to gratify two inconsistent propensities which could only be done by playing false to the one or to the other. Hence, where the impression of the moral law or of the Divine requirement is weak, and the sensuous desire is strong, judgment is perverted, and the man being carried away by the imperative character of the desire, the Will in these circumstances acts freely accordingly. It cannot be said that a man hath in such a case lost his freedom, because it is certain that had the facts been known to his fellow-creatures, he would in that case have restrained himself from practising deceit, because of the disgrace thereby accruing to himself. A man may choose to be false in order to commend himself to another.

CHAPTER III.

CONCLUDING OBSERVATIONS.

IT has occurred to me while presently residing at a rural resort for the sake of bracing the bodily constitution somewhat, that some general observations—not for anticipating any difficulties which may be entertained, or for obviating objections which may likely be expressed on some of the intricate questions which have been more or less brought under review in the preceding pages, but at all events for concentrating the scheme of thought which has been propounded, and for bringing into clearer relief their harmony and scientific character. As to objections that may present themselves to my readers, it is perhaps impossible here to forestall them, and I can only promise that, if this volume is honoured to be promoted to a second edition, I shall do my best to obviate such difficulties as may be fairly propounded, and in the spirit of one who seeks for truth, and cares only for the attainment of truth.

I may state that where I am now placed, I stand under one great disadvantage, that of being without books, and at a distance specially from such books as would be servicable to me ; and hence I cannot quote the words of authors, nor pretend to give their arguments. I have, however, some knowledge of the current of thought which has prevailed in discussing

the problem in question, and if I refer to any, these can be authenticated.

Let me here say that, while I regard the externals of the world with which are surrounded, as *φαινόμενα*, I regard them also as *οὐσια*, as therefore realities of which we have to give an account, of which it behoves us to say *how* they have come to pass. Every phenomenon is to be looked upon as an effect; and hence I say that all phenomena lie in the category of *Causality*. Then, on coming to the category of Causality, we have to ascertain in what it consists. And to this we answer—in these two, Condition and Relativity. But what is Condition and what is Relativity? I answer Condition is *the particular modification which may be imposed upon Quality or of which Quality is susceptible*; and Relativity has respect to *the particular relation in which a combination of conditions may be made to stand to one another*. It is to be noted that the *association* of conditioned objects must be in such conjunction or contiguity, as to be brought within the sphere of each other's influence. Then, and only then, it is that Causality operates—operates in virtue of the Affinity that exists among the conditions concerned. *Affinity*, therefore, is shewn and expressed, when separate conditions are brought within the range of each other's influence. It is to be noted that each variety of condition changes the character of the affinity which an object would otherwise present to the adjacent objects, and it will affect also the affinity whereby the molecules of any one object cleave to one another, making it what we call a solid, or a liquid, or a gas. It is found as a rule, that the application of *heat* relaxes the attraction which the atoms have to cohere; and in

some cases it creates a very strong repulsion, which becomes sudden and violent, as when a lighted match is applied to gunpowder.

We come, then, in the process of our inquiry, to ask what is Quality as involved in the very nature of substance, and our reply is—Quality is that characteristic of substance which constitutes the very basis of substance, which is inseparable from substance, and without which there cannot be substance; and it exists essentially and primordially in substance in conglomerate union as one comprehensive and absolute totality, out of which all particulars of Quality are derived. Substance is known as such, by reason of the inherent attribute of Quality; and we say that specific substances are different from one another according as their Qualities are particularized. We are acquainted with a good many different Qualities of substance—Qualities which are essentially different from one another; and yet these Qualities have not only an affinity for one another, in that they enter into relationship with one another, according to certain definite and fixed laws, but exchange conditions with one another as we see in the conversion of the sap of the soil into the protoplasm of the plant, whatever may happen to be the characteristics of the plant. Hence, we are compelled to infer that there is and must be a unity, under which they all stand connected as one. As condition is lost in quality, as being the accident of quality, so we say—all qualities are lost in one generic quality which comprehends them all as the colours of the rainbow are lost in generic light.

There is, then, a primordial substance from which all others are derived. Of this substance we have

come to have practical experience in the Ether, of whose presence and services we are made cognisant from a variety of considerations, but especially from an inquiry into the phenomena of light. On this point I must refer to the valuable observations of Professor Stokes, given in Appendix I. I have noticed also that it has an inherent Dynamic as well as Qualitative attribute, and that as particulars of Condition are changed, so correspondingly particulars of Energy are changed. Energy when particularized becomes Force. We therefore come to know what is the very foundation of Force. As I have said that every change of Condition creates a change of Affinity, and every change of Affinity is Force; and Forces are of all kinds from the extremes of attraction to the extremes of repulsion. We find that there is a law of contiguity among separate objects, so that these affect one another in consequence, and that the connecting link between them is Ether, which hereby joins the affinities and brings out their operation. And however many and however diverse be the conditions involved (and they must in numberless instances be operating in all possible directions) Ether as the inexhaustible spirit-servitor fulfils all requirements, without collision and without confusion.

But while Quality and Energy are the inherent and inseparable attributes of substance, in its primordial and essential being, as natively existing in a generic state, and therefore without the demonstration of any particulars, and in this state it behoves that all particulars being held in perfect balance in pure Ether, there should not be in these circumstances aught that should disturb the energy—aught that should carry it to display

force one way or another. We have come to be practically acquainted with such a substance, and this in its primitive and self-existing nature, in that all things are found to live and move and have their functions therein—in that it has a sympathy with every particular of existing matter, and gives efficacy, *i.e.*, force thereunto.

We conclude, then, that what are called the primary elements of matter have their origin in primitive substance, and therefore that they have a natural affinity for one another, as being every one of them the offspring of the same mother-substance; and hence that they have a definite and fixed relationship, in which they come to be chemically combined, when placed in a natural attitude to one another, while, of course, there will be more or less a repulsion from one another, in circumstances under which they cannot combine; and further, that in circumstances where the particles of matter are combined into one solid consistency, and then have their condition altered, there are cases in which their affinity is so changed hereby, that they suddenly fly asunder with an explosion. As regards the material state of quantities primarily ethereal, we may say that atoms arise from the fact that qualities created in the ethereal medium have by the application of some mysterious influence which we may call *temperature*, have become thickened into grossness, and hence are divisible into the minutest parts. It is to be understood that the sensible qualities of matter, which show themselves more immediately to the external senses, such as hardness, colour, odour, savour, and sound, though not directly manifested to us in the spirit-world, yet may in some

sense exist therein. That there are forms in the spirit-world, and variously endowed with different qualities, is not to be questioned ; and that living beings in the spirit-world are able to communicate with one another under circumstances, if not wholly analogous to those which are familiar to ourselves, yet certainly by the aid of the universal ether, as in our own case, is not to be doubted ; but only in a manner much more refined than pertains to the material world.

What, then, is the nature of the spirit-world, which we hold lies at the foundation of the material world ? Therein, we say, Forms which are made determinate bodies (if we may here use that term) live and move and have their being in the fathomless ocean of spirit-substance which abounds everlastingly and endlessly, as the link of conditions which are the mainspring of individual activity. Hence we say, all matter has its foundation in the economy of spirit ; and matter itself is to be regarded as an economy of grosser forms adapted for the propagation of a race having grosser forms ; but in the case of man, who is so united with the spirit-form called soul, which is itself generated in ether by means of the pre-existing bodily form, the bodily form being accompanied by its attendant spirit form, shews the fact of a harmonious intercourse between them, and explains what has hitherto been regarded as the mystery of mysteries, the mutual interchange of influences, and the mutual action of the one upon the other. We know, indeed, that this action is constantly interchanged in the purely objective economy, and is illustrated in all the forces of nature, such as Gravitation, Light, Heat, Electricity ; and Magnetism ; and

in the mind of the animal-creature it is made to play a new and remarkable office.

It is here that this same medium, when made representative of the bodily Me, is enabled to give forth its highest and noblest prerogative, viz., consciousness, and hence the *foundation-consciousness* of every animal-creature in all cases is the consciousness of its body, that is the consciousness of self, that is self-consciousness ; and to this comes to be added other forms of consciousness, according to the number of inlets which are supplied for this purpose—inlets not only from the external world whereby information of external objects is communicated, but inlets also from the storehouse of impressions that are lodged in the cortical substance of the brain, and which are separated by a process of analysis into parts, when there is abstraction of parts, with synthesis into new forms ; while also the operations of Reason and of Reasoning are variously performed. And hereby a spirit-ego or personality is formed varying according to the furniture with which it is equipped in the exercise of experience.

In this process of furnishing an intelligent Me, we are made acquainted with the various methods of fulfilling the higher ends of being. We see under what circumstances the various faculties of the mind come to be exercised, and how we are enabled to employ them. There has been much said and written on the inherent powers of mind in engaging by itself the great powers of Reason, and of the self-possession by itself of the ideas of Time and Space, of Moral Feelings, of Causality, and such like. If our exposition of the Ego and of its origin is sound, this cannot be ; but as certain portions of our mental states are unmistakably

traceable to the instrumentality which is furnished by the material apparatus, so we are prepared to show that all, even the most complex of the loftier powers of mind, are due to this source, whether it be Memory or Imagination, Conception in framing means for the fulfilment of a purpose, or Reasoning in drawing conclusions from premisses ; or whether it be the Intuition of moral obligation or the Apprehension of the relations which indicate Time and Space, we can clearly show the entire dependence of the mind throughout on the wonderful organization that is provided for these ends. And if this should happen to be questioned, we are prepared to point out under what processes the operations are accomplished.

Nor is it in the field of mere Intelligence only, that the organization with which we are supplied by our cerebral apparatus fulfils the accomplishing of the great offices of the mind, but in the exercise of Will, whether in the origination of Will, in the suspension of Will, or in any modifications of Will ; in short, in the entire management of Will, organization fulfils its indispensable part ; and without this, we can honestly feel and boldly avow that we are endowed with the great prerogative of exercising full freedom as to the forth-putting or the non-forth-putting of Will in any set of circumstances ; the fact being that, while Will in all cases must be regarded as an effect, the Ego in the exercise of its Judgment as to the propriety or utility, or advantage of its immediate volition, finds itself drawn for the exercise or non-exercise of its function : the idea that is interposed at the last, constituting the final arbiter in the emotion which has to be fulfilled.

It is obvious that, constituted as man is in relation to the world outside of him, he is enabled to exercise all the powers of Mind and of Will, which we have ascribed to him ; and among the special ideas which arise in his mind is that of a great First Cause. He cannot get rid of this conclusion under the principles we have adopted. It arises from the very circumstance that when he sees an effect, it forcibly occurs to him that there must be a Cause. His whole experience connects the two. Yes ! in all the departments of life, and from his early days in which cause and effect are constantly illustrated before his eyes. When, therefore, he looks on the phenomena of the world, and sees them as effects, he is bound to infer that they have a Cause. He may not be able to point out the immediate as apart from the remote cause. But it comes to this, that there must be a primary Cause in the first introduction of the foundations of the world. What then can we say as to the first and independent Cause, the Framer of all things, the Source of all limited beinghood as found in our world ?

This question has been a perfect puzzle to inquirers. Inquirers have reached what they have called the "Unconditioned," and there they have been launched in a *mare infinitum*, without a margin or shore whereat to touch ; in plain terms there is no peg to hang anything upon, and indeed without a single relic to set up.*

* Sir Wm. Hamilton tells us that "the unconditioned is incognizable and unconceivable, its notion being only negative of the conditioned, which last can alone be positively known or conceived." (Discussions, p. 12). His unconditioned was tantamount to annihilation, in as far his unconditioned was the abrogation of all quality.

Others have taken refuge in the eternity of matter, and have supposed a universe of atoms or monads, as the centres of power, and have awkwardly enough supposed a structured universe spontaneously coming out of these.* Forgetful of the great doctrine of Causality,

* Priestly, Hartley, and Hobbes contended for an absolute materialism with more or less modifications. Büchner says—"The immortality of matter is now a fact scientifically established and can no longer be denied." (Force and Matter, p. 13). Dr. Maudsley says—"We find it a hard matter to declare at what point the brain loses all its inherent properties as living structure, and becomes the passive instrument of an immaterial entity. Those who repudiate such materialism may comfort themselves by conceiving a fine matter of extreme subtlety and tenuity—a sort of immaterial matter—whether they spiritualize matter in this way, or materialize mind, is a question of words, not of facts." (Physiology of Mind, p. 128). This gentleman ought to have recognized that matter is not simply a question of tenuity, seeing one characteristic of spirit-substance is its indefinite capacity of involution. Mr. Picton says—"If by substance we mean that which is, and must be, then we know that life is; but we do not know anything else. And the phenomena of the physical world are at least conceivably explicable on the hypothesis of ultimate centres of energy, which centres may, for aught we know, be to our consciousness the elementary phenomenal definition of a Universal Spiritual Power. Life we know; Force we feel; nothing more." (The Mystery of Matter, p. 54). Mr. Barrat says—"The difficulty which at present is felt, is how consistently with reason and fact, to conceive the ultimate relation of these few existences, Matter, Force, Energy, and Motion. Some conclusions in respect of them are pretty clear. For instance, Matter is a system of centres of force—force is known only as a function of Motion. Energy is measured by the motions or the condition of the motions of masses; and mass depends only on the number of gravitating atoms or force centres; and finally, motion is of atoms and the aggregates of atoms, that is again of centres of force." (Physical Metempsychic,

as invariably and irresistibly fulfilling an effect precisely in accordance with the Causal ingredients and relationship into which they have entered into combination in producing an effect; forgetful also of the equally imperative doctrine that *in initio* before Causality can fulfil its end in symmetrical order and harmony, there must needs be a designing and ordering mind, not only in devising and preparing conditions, but in adjusting one condition to another in the fulfilment of an end, they have begged the doctrine of an absolute Evolution as the law of mere existence, in accounting not only for the progress of phenomena but for the *primary initiation* of beinghood as we now have it. What we say is, that it becomes men endowed with lofty reason—reason based on great experiences, not to build up theories which have in them no naturalness—theories which are unsupported by any analogies—theories which are not only adverse to all experience, but to all that we can imagine as probabilities—theories which subvert our common understandings as to what is probable or possible. If there were nothing in eternity but atoms—a universe of atoms, call them monads or any other name, the query is, How came they to be constituted into structures? No man can tell. All inquirers with such data only, are left in the depths of utter mystery. And if they establish a foundation of structure whether a jelly fish or anything else simpler, and say that there has been descent therefrom by a process of evolution, the mystery is not in the least degree removed, but if

p. 69). I trust there has been already shewn herein a more excellent way.

possible, deepened, in as far as no answer can be given to the question—Whence came the jelly fish, or the amœba, or whatever the given foundation is; or whence arose the multiplication of new forms and new qualities in such exceeding great complexity, and yet no less in beautiful arrangement and harmony of parts. Talk of natural selection! This only confounds the problem. Whence came the material to be selected; and, granting that there were sets of independent materials, whence came the very wonderful concatenation of elements. To us it seems not only a miracle of operation, for which natural law has no answer, to assemble a series of separate and independent ingredients to compose beautiful and refined structures without an adjusting hand, guided by a purposing Intelligence a conclusion of which nature (if we examine it fairly) gives no experience. It is said that millions upon millions of years were required for this. We only darken counsel by taking refuge in the category of Time. It is demonstrable in the doctrine of chances, that a universal harmony could never have been achieved under such circumstances. As well might we believe that any number of letters, if allowed to float in the great void, would in time adjust themselves into a beautiful poem. We believe in the doctrine of evolution; but not in an evolution which is inconsistent with the law of natural generation, and involves in it nothing less than an intelligent creating hand; for assuredly if there is found one distinct and definite species, and another separate and definite species which contains properties and forms for which there was no natural pathway by natural propagation, which no natural causality could have introduced, and which, therefore, could have

made its appearance only through the interposition of an intelligent arm, we are constrained in these circumstances to have resource to an all-intelligent Author. Every thing betokens this, if we would be fair to our reason, to our own experience, and to the conclusions which we are accustomed to draw in analagous exemplification.

We are constrained, then, to infer the operation of an Intelligent Reason, in tracing the beginnings of things to a Universal First Cause, while in the continuity of things created, we are equally constrained to see that there is a law of propagation—of like producing like, with varieties according to the external influences that happen to have been introduced into the Causal operation. And if we could but discern what these influences precisely are, we should then be in a position to foreshow and to detail the evolutionary changes occasioned thereby. We should, in these circumstances, be qualified to observe not only the wide distinction betwixt creation and propagation, but to find that it is only in the latter category that there can be evolution; and further, that there can be no evolution till creation has laid the basis of developments in the processes of propagation. Assuredly there is no consistent ground for the primary initiation of evolution apart from creation.

Here we have to tackle a very difficult problem. We have already had before us the universal ground of Existence in what I have styled the absolute Impersonality, out of which all particular substances have been derived, and I have also, in connection therewith, spoken of the absolute Personality as the intelligent Deviser and wise Architect by whom they

have been conceived and framed ; and here the question is raised—What do we say about the personality of Deity? We hear of “the form of God.” And the very name and nature of “form” involves limitation ; nay more, the very conditions of thought itself involves limitation, in as far as there is the distinction of one thought from another, and the thought of any definite object is limitation ; and in the Divine Personality there must be what we call a definite constitution. How otherwise could definite objects be inaugurated? We must, therefore, imagine to ourselves a definite Personality as characteristic of Deity.

Now, if we apprehend in God a definite Personality, as we are bound to do, how are we to suppose this Personality as equally absolute with the infinite Impersonality? We are assisted somewhat in this inquiry by asking—how is it that inferior personality is displayed in the great spirit-medium by which all worlds and all objects are enveloped, or in which they are contained? We find that Form is equally displayed over the whole arena or range in which the radiation of the object extends. It is ascertained, as has been frequently noticed, that individual forms while extending according to their mass, show diminished form according to the inverse square of the distance. What then? Why, here is this very remarkable fact, that *every portion of the sphere* to which the radiation extends, *is filled with that form*. This is proved by a simple experiment. Set up a mirror, say three feet, as a radius from the object; the object is depicted thereon all throughout in every direction in a circle. Carry back the mirror three feet or six feet, or any number of feet, and the radiation of

the form is still in every part complete all round, but proportionally reduced. What lesson does this teach us in regard to the Divine form as displayed in the etherial medium—a medium which I have ventured to name *Pneum*, in order to point to it as indicative of a peculiar spirit-nature. Form, as manifested in the material world is a distinct and definitely localized filament or configuration ; but so far as it is manifested in the spirit-medium, it is not so treated and localized, but pervades the area to which it belongs ; and this at every point. It has margin throughout. It is difficult for us to realise how this should be ; and it helps to open our understandings as to the extraordinary nature of spirit-substance in its exhaustless power of representation. What can we say then as to the representation of the Form of God? We must of necessity believe that there is some Form attached to the Personality of God ; but we can predicate nothing whatever respecting the character of that form, nor can we with any propriety assign absolute boundaries to that form ; or rather, if we cannot think of form without boundaries, it is not easy to say where or how the boundary begins or ends. We are taught by the limitless extension of creation, that the expansion of the Divine Works do not admit of contraction, as if saying—“Thus far and no farther shall creation be displayed.” Whatever then we may think about the Form of God, it is obvious that there is no extension reached by the arm of the Most High, but it may be advanced still farther, and that there is no part of the vast compass of nature but He can interpose therein.

And here we have one or two questions which have been regarded as puzzling enigmas which it behoves

us to take into consideration. One is the grounds of causality and of varied productiveness in Deity in the creation of the world ; and another is to show that such manifestations as Space and Time have of necessity had their validity as integrants in the personal Absolute ; and, still further, we may enter into the consideration of a difficult doctrinal problem touching what is known as the Predestination of God, that is the decisions of the Divine Will in connexion with the knowledge or foreknowledge of the Divine Intelligence.

We may begin with the simplest of these questions, the origin of Space and of Time. Now what we say is that Space is a certain *limitation in Infinity*, and Time is a certain limitation in Duration. Space has reference to *extension* : Time has reference to *transition*. Space marks *the negation* which lies between certain boundary lines ; Time marks *the negation* which lies between the passage of an object from any one point to any other point. Space is marked out by each one of the globes which fill the heavens, and the interjacence or chasm between them ; and Time is marked out by the movements of these globes, and is the intermittence of duration which marks a constant transition ; or, shall we say, it is the interval of duration which elapses betwixt a movement from any one point to any other ? For example, we say, the sun rises and the sun sets, and the interval between the two we call Time ; and Time, like Space, can be diminished indefinitely. By means of clock movements we can divide the day into hours, and the hours into minutes, and the minutes into seconds, and, if we chose, the seconds into still smaller minicles of time. There is no limit

to the subdivision of time. Suppose an object moving with the rapidity of light : and suppose it to move along a line divided into yards feet and inches, what would be the period of time in which the object would take in moving from the one line of division to the other ? It might be calculated in figures, but could not be realized as an interval in our experience.

What do we say then as to an absolute infinity and an absolute Eternity ? Infinity, we say, is *extension without any boundary lines whatever* ; and Eternity, we say, is *duration without any beginning or ending*. What then ? The very fact of envisaging personality or what we may call individualism, of necessity implies the idea of space. In the Personality of God, therefore, we cannot get rid of the idea of space ; and yet it is that space to which we can assign no limit. The operations of God may not be confined to any particular space : but the very thought of a personality of necessity implies space, but obviously it is that space which does not admit of restriction. Again, we cannot suppose Deity to be a dead and immovable thing ; on the contrary, his being implies a living and constantly moving being—a being having thought, and therefore the transition of thought. What then ? Why, it follows that as *Infinity carries space in its bosom*, so *Eternity bears time in its bosom*. We have our philosophers telling us that they “ cannot conceive an absolute commencement,” and when all is reduced to what has been called the Unconditioned, they cannot conceive an *initiation of space* that is a limitation in extension. But if it be considered that space is an inherent prerogative in Infinity, and that time is an inherent prerogative in Eternity, we are no longer

troubled about an absolute commencement, knowing that *there is no such phenomenon in the Absolute.*

And now we come to the great question of Creation. Creation, of course, has had its beginning, as we are able in our present circumstances to apprehend it; but its beginning only, as a *continuation* of that ever-living action which belongs to, and is inherent in God. The thought has occurred to man, How could creation arise, and whence could creation be produced, if before what is technically called "the Beginning," Deity was alone, sublime in the ever constant activity of his own thoughts. The mystery behoved to be insurmountable, if we were unable to entertain the idea of an Impersonal Infinity of fundamental substance as well as a Personal Absolute, from whose devising all things have sprung. The mystery would also be still further insurmountable, if we were unable to see what constitutes the nature and foundation of Causality; and, further, if we were unable to discern that this foundation essentially resides in God. Need we repeat in what this foundation consists? We speak of the All-conditioned in contrast to the Unconditioned. It is a mistake to think otherwise of the Personal Jehovah. Grant that in him resides, and to him essentially belongs, what forms the fundamental qualities which constitute the very nature of his beinghood, and we have the case of the Creator before us.

What constitutes Causality? We answer, the junction of one quality brought into combination with another, so conditioned as to produce the effect desired by the operation of their affinity. We have only to understand that God sees by his intelligence what quality would require to be joined with another in

order to produce the *tertium quid*. Recognizing this much, we cognize under what circumstances this, that, and the other device, that has come forth from the mind of God, hath had its origination.* And as regards the materials from which he hath obtained his objects, we have already indicated the inexhaustible quarry of the etherial medium, through which an endless supply could be obtained. In truth, we see that there behoved to be ever before the mind of God an objective arena for the foundation of worlds, and for the enlargement of worlds upon worlds, and for the furnishing of them with suitable objects adapted to the wants of the creatures which he has made. In our experience we discover and discern, that all material objects, under the light of day, have their phenomena radiated in the etherial medium or *pneum*, according to the law of inverse squares; and that the representation hereby projected does not only pervade the whole area which it involves, but that it carries out in spirit-condition the precise quality and form of the original which it delineates. If, then, the All-conditioned, operating as Cause, and having the Impersonal to operate upon,

* It may appear presumptuous to some, to argue about the mode of Divine operation in Himself as a Personality—but what is it which every rational man pursues in his reasonings, and is obliged to pursue? Is it not the application of ascertained principles? If we have got a principle which satisfies and explains the great problem of Causality, are we not entitled to maintain that the principle holds good throughout? We are not called upon to suppose that in this matter, there are more principles of action in fulfilling a function, than one. There may be more methods than one; but the principle in each must be the same. It is here the maxim is particularly applicable, "*entia non sunt multiplicanda preter necessitatem.*"

constitutes from his own inherent conditions, any special object, and sets it forth, what follows? Why, upon the principles which we find realized among ourselves, this very creation, by an inherent law, begets consimilar representations in the endless ocean of Ether. No doubt as we experience these, they are but transitory representations, existing or subsisting, so long as the original remains, even as our image exists, while it continues before the mirror. Yet as we ourselves can fix that image when it alights and takes effect upon an impressible plasma, it is not difficult to imagine how the Omnipotent might multiply forms and qualities that shall be permanent to any extent. We are not to suppose that one can fathom and compass the many ways in which the Omniscient One might construct creation; but it is a perfectly legitimate process for us to argue from what takes place in our experience, to what in analogous circumstances might take place in the hands of our Maker.

We can imagine, then, how Nature (as we term it) came into being, and how natural law came to have its province as a valid operation in the world. It behoved God first to create the rudimentary elements, as the basis out of which he would construct the more complex phenomena of the universe. We have the letters as the foundation of our syllables; and syllables as the foundation of our words; and words as the foundation of our sentences; and our sentences as the foundation of our literature, and they have to be curiously built together and interlaced to answer the ends of a living language, and so become the source of living communication between man and man. We

find, in like manner, that it behoved the Creator to institute an alphabet of creation, and accordingly we have what are called the primary elements, all of which could separately be obtained from the generic ground of all substance. These elements would each have its own distinctive quality; and being one and all derived from a source where they had originally their entire union and amalgamation, it behoved that they should have affinity with one another, and accordingly that they should of necessity be qualified to enter into varied union, according to the relation in which they might happen to be associated. It is easy to suppose that the All-wise Intelligence would build them up in such forms and conditions as would answer the purposes which he desired that they should serve. As a fact, we find the worlds and the furniture with which they are equipped so constructed. And this we call the great kingdom of nature.

We find that the Kingdom of Nature hath its own operations. What are these, and how do we account for them? They are the Forces which are variously found in constant operation — forces whereby the operations of nature are carried on — forces whereby worlds are not only sustained in being, but whereby the creatureship of the world is propagated and maintained for the continuance of life, while the preservation and development of being are displayed in freshly improved condition. There are what we call the laws of nature; and they are dependent not only on Energy, which is the inherent attribute of substance dynamically, but upon the Quality or Qualities of the Substance present, which give law to the force or forces which energy describes. Hence, not only is Force the product of

Energy according to the conditions which happen to be allied in its production, but whatever be the forms under which force operates, these very forms it carries with it in the minutest features into the all-pervading Ether; and if there is the medium of an organizable plasma, this plasma is correspondingly affected; and hence, we account for growth. And agreeably to this law, we find each tree producing after its kind, and each animal producing after its kind, and all because the laws of causality are of the most precise and determinate character.

And on this very principle also, viz., the fixed and unvarying laws of Causality, we can account for all the changes which take place in the processes of Evolution. There is nothing surer in nature than that "like produces like": this is an iron law which admits of no deviation whatever; and it is because of the inexorable fixedness of this law, that any extraneous influence entering into the category of operation, of necessity shews itself. A single letter of the alphabet entering in among the letters of an existing word will entirely change that word, and the nature of the change, moreover, will very much depend on the place which is assigned to it in the association. It is the same in the kingdom of nature. The same ingredients as have been noticed when differently associated, will produce different results, and if additional ingredients are added, these will show a corresponding modification in the effects. The office of nature is *production according to the ingredients which are associated in the Causal nexus*. Hence, we ask, if there is no extraneous hand to introduce new forms and new conditions which constitute an entirely new type of creature, whence could such new devices have come?

We come, now, to ascertain what is the nature of the providence of God in connexion with the great ends which He has to serve by Creation? We may well believe that such an elaborate mechanism of things has not been introduced, simply that they may by and by be dismantled and discharged and annihilated; and all for the mere purpose of beholding their *temporary* beinghood. It might suit the mere creature to be amused with childish toys, and by and by to wish them destroyed; but we have to regard the purposes of an Almighty and All-Wise Creator; and we say it is alone worthy of Him to have had an all-important and permanent end before Him, to be fulfilled by this grand work of Creation. We have seen upon what grounds the animal creature is made to live, and upon what still higher grounds man stands as a mere creature of earth. We see that as such, his knowledge is of the earth earthy, and that as sure as his body dies, so his mind as a mere intellection of earthly elements must die also. The things of this world cannot give immortality to the soul; there is, and can be, no immortality in mere material things; and they cannot give that which they do not possess in themselves. Material things, of necessity, serve but a temporary purpose; however long their preservation may be protracted, they are constantly changing, and constantly wasting, and in the nature of things, go in the long run to destruction. But they may be the instrumentality for supplying a basis on which to engraft spiritual things—things which are essentially eternal. Accordingly, it has pleased God to reveal Himself specially to man, and through this, to implant the seeds of the Divine nature in his soul. The nature of

this revelation is such, that when duly embraced, it takes the soul out of the perishing elements in which it lies naturally immersed in this life, and gives it an adhesion to the things of a more refined and permanent life. The very fact of man having a revelation of God—of the sublimity of His nature—of the purity of His character—of the equity of His righteousness—of the glory of His truth—of the sacredness of His faithfulness and perfect integrity, without malice, guile, or hypocrisy, is of unspeakable moment to man; in that there is hereby an engrafting upon His soul of principles that can never perish, when they become the principles of action by which the soul is characterized. These principles are inconsistent with a mere subjection to carnal and worldly likings. Hence, the necessity, in order to immortality, of a weaning from an attachment to, and a dependence on, mere material things, as if these constituted all our care and concern, and of a holding to things which are revealed to us as characteristics of God. We believe that such a spiritual state has been manifested to men by Jesus Christ. Hence, the life and the principles of Jesus Christ constitute for us the ladder whereby we are to climb to immortality.

This immortality comes to be nothing less than salvation, that is an escape from a death, which is, strictly speaking, an extinction of our earthly being, and a preservation in life, that savours of permanency, as being a sharing of what belongs to God. The renewal of the soul, therefore, in the Divine life, ought to be the chief end of man in the discipline that is appointed for him in the life that now is. It is a strange and remarkable fact, that there should be so much diversity

of thought in respect of the pursuit of immortality. No doubt the difficulty which has prevailed, and which still prevails, is to be traced to the ideas of sin, and of the removal of sin from the human constitution—ideas which have unfortunately been ingrained in the church through the interpretations which have come down to us, and have had place and position in the church, because of the ignorance of the human constitution and the consequent misinterpretation of Scripture. As churches, we have greatly failed to realise the true attitude in which Jesus Christ, who is set forth as our great Exemplar, stands to sin, and consequently the true attitude which He sustains towards the great question of taking away sin.

Let it ever be remembered that human sin fundamentally springs from the flesh, as being antagonistic to spiritual life; and necessarily so, because spiritual life goes to restrain carnal life. Hence, St. Paul's saying, "They that are in the flesh cannot please God." The reason why they cannot please God lies in this, that they cannot, as carnal persons, practise spiritual life, and therefore cannot prepare for immortality. Now that God hath revealed Himself, and thereby given to man the principles of a new and spiritual life, the pursuit of carnal and worldly things, as ending in death, cannot satisfy God, who desires that man may have immortal life. Hence, under the new regime which God hath ordained in the New Testament, the carnal mind is regarded as "enmity with God"; in other words, adherence simply to the calls of the flesh as our all in life, is regarded as *sin*, in as far as it is antagonistic to divine principles. Christ Jesus, we are told, "came to put away sin," and he did so by "the

sacrifice of Himself." How so? We are told He took to Himself the body of our flesh, and through this, "He was in all respects tempted like as we are;" but He overcame all the allurements and temptations wherewith He was beset, and lived wholly in accordance with Divine principles. All the influences of the flesh, and of the world, and of the devil, had been applied to Him, but in vain; for He could say to His Father, "I have finished the work which Thou gavest Me to do," viz., that of sacrificing the flesh. Hence, Christ is said to have "laid that foundation, other than which none can be laid," for securing eternal life. This accomplishment involves what is called Atonement, in as far as it was the removal of the carnal life, as at best no preparation for God, and the substitution of the spiritual as the requirement of God.

Now, this life of Jesus Christ is revealed to us, and is recommended to us for our instruction and imitation; and when we adopt His principles and imitate His example, we are said to have faith in Jesus Christ, and hereby to have the *application* of His atonement to us. Hence, faith in Jesus Christ means, *not the substitution of Christ for us, but the application of Christ to us*; for hereby it is that we are made one with Him, and become partakers with Him. What we say, then, is this, that Christ is shewn to be the grand standard, and the indispensable foundation of Divine life for humanity, in the plan of God for accomplishing the sacrifice of bodily lusts, and of bringing about the immortalization of men.

The church has puzzled and perplexed herself about the introduction of sin into the world, and the prevalence of sin in the world. There are two kinds of sin

in the world, the sin of living simply to the flesh when a contrary call is made on us; and the sin of knowingly perverting the truth, despising the Divine command, and defying the express threatening of God. To be a mere creature of the flesh was obviously man's created state; and as such, he could hardly be said to have sin while knowing nothing better: but, as a creature of the flesh he could have no eternal life, in as far as he could be made to have eternal life only by the communication of God's word; and this was what God intended and desired him to have. Hence, God revealed His own mind to him, He took him into Eden for that purpose. *This of necessity involved opposition to the laws of the flesh*; and hence, "the flesh lusted against the spirit and the spirit against the flesh;" and hence, in that case, the flesh became sin. There was *no alternative* to this, for EITHER MAN MUST PERISH AND BE NO MORE, OR SIN MUST HAVE AN ENTRANCE INTO THE WORLD. It was for the glory of God that sin should be encountered, that it might be overcome, rather than that man should perish with the beasts, and have no immortality secured for him, and the great end of creation therefore be frustrated.*

The great struggle has been going on for ages past, and in the course of events, man is becoming increas-

* Here, then, is a very simple explanation of the fall, or in other words of the introduction of sin. How came sin? The answer is and must be, through the ministration of the Divine Spirit to man. Apart from this, man had not known sin. He could not, if he had received no revelation of the Divine law; for sin is the transgression of this law. Sin, then, began in man when he, following the impulses of the flesh, rebelled against the

ingly prepared for more fully realizing the boon which is ordained for him. He will be matured for this in the course of Divine procedure. But the question arises—How comes it to pass that the desire of God is so long in being accomplished? Does not sovereignty belong to God? Is not God at the helm of affairs? and what obstacle is there which God cannot overcome? The answer is, that it is for the glory of God that man should be left to the freedom of his own will and *by his own will* be brought to salvation. This explains the long delay which takes place, ere the world of mankind are turned in obedience unto God. God is thus constrained to wait upon man's blindness and obstinacy as refusing the rulership of God.

But this view of the case seems only to deepen the mystery; for it is asked, How, in these circumstances can God be said to be the Author of man's salvation? And if a man turns to the Lord, how can the honour and glory thereof be assigned unto God? It is said—If man be left to himself, and if God has to wait for a change of will on the part of man, then, it follows that surely man must have power in himself and by himself to become Godlike in his nature! Or again, taking the other alternative, it is

Divine law. Under this law, man was between two great influences, the law of authority grafted on him from without, and the law of the flesh which was natural to him. He yielded to the latter, and ran counter to the former. Hence, he has forfeited the promise of life, and the struggle has gone on, till it has been found that the second Adam has displayed a victory over sin, and has displayed a new manhood absolutely, under the control of the Divine Spirit.

said, if man has no power by himself of fulfilling the Divine will, then must man be regarded as altogether the puppet of God; and he cannot be said to have entire freedom of will in the circumstances. Hence, the perplexity by which theology is puzzled. It is most true that man left to himself has no power to turn unto God; and most true, that if a man turns unto God, the glory thereof belongs unto God; and with all this, it is most true that man is left to the freedom of his own will. How is all this explained? The answer is that *God supplies the motives* to man's conversion. Without the motives, man would have no inducement, no will, no ability to change his mind; without divine motives there could be no divine will, and no sanctification of soul. But what are motives? They are teachings, encouragements, and inducements to follow a certain course; but they are not compulsions and they do not at all interfere with man's free will; for man is left hereby to weigh consequences, and to determine as seemeth good to himself, and this explains the whole matter of human freedom under the discipline which God has ordained.

But why, it is asked, Has God ordained that some should be predestined to everlasting life; and by consequence that others, to say the least, should be passed by; and this, through a decree pronounced from the beginning? We are persuaded that much misconception also prevails in connection with this great doctrine. Of course it behoved that God in creating the world should have a great and final purpose before him. We have seen that the purpose was not (could not be) fulfilled by the introduction of mere earthly things, because earthly things perish; we have seen that God's pur-

pose lay through this in promoting and preparing a people for eternal life; and God saw clearly at the same time that in securing this purpose, there would be large numbers among the generations of men, who would fail to come under the category of immortality; and no doubt also some who would abuse the great privileges of grace offered to them, by turning a deaf ear to his call, and even by profaning the name and the laws of God. What then? Was God hereby to be prevented from introducing his great scheme of immortality? Here lies the terrible alternative. Were he to do so, then the world and the things of the world would have to be blotted out; and man too, like the beasts and all perishable things, would become as if they had never been, and the elaborate work of God in the creation of the world would have been vain and resultless. But that would have been wholly unworthy of God. Hence, it came to this, that the foresight and the fore-knowledge of the waywardness of some must not prevent the bestowment of eternal privileges on those who would be induced to listen to his voice and to obey; and so secure for them a glorious immortality.

Let it not be thought that God was hereby a Respector of persons. Who they might be abstractly that should fulfil his will, and who they might be that should reject his counsel, was nothing to him. The failure of some to come under his covenant, and the blameworthiness of others who might rebel, did not concern the righteousness of the great object which he had at heart; for he would offer the word of life—not to individuals as separate from the mass, but to *all* who lay within the sphere of its deliverance; and his

proclamation was this, that to those who should obey the *general* call upon all to repent and forsake their sins, there should be a *special* call given to become inheritors of eternal life. Could anything be more natural, or more equable, seeing that *such parties only* as break loose from the trammels of the flesh are adapted to exercise faith, and to receive the grace of life, and be made heirs of salvation?

The church hitherto, when speaking of the lost, has been able simply to ascribe all to the mere sovereignty of God; and in blank helplessness to expound the ways of God, it could only say "Even so Lord, for so it seemed good in Thy sight." It no doubt becometh us to bow in meek humility under the mighty hand of God, in cases where we do not understand, whatever be the trying experiences to which we may be subjected, resting assured that what we know not now, we shall know hereafter; but as regards the great plans and purposes of God, we know and are assured that *things are not left to the operation of mere sovereignty*, and that what may appear questionable to our limited understandings is not the outcome of irresponsible power, but of *power directed by what is right*. Whatever were the Divine purposes before the foundation of the world, we are certain that these purposes were not abandoned to the exercise of mere sovereign authority, but to authority guided by the highest wisdom and inspired by unbounded love. It is therefore demonstrably impossible, looking to His very nature and attributes, that God could have *a priori* fore-ordained any to eternal pains and penalties. The Apostle Peter lays down the principle of fore-ordination very clearly and succinctly. He tells us that election is "*according to*

fore-knowledge"; it must be so; it cannot be otherwise. In other words, it intimates that *Intelligence* in the very nature of things must be antecedent to *Will*. We find this realized in our own case, and were it otherwise, the Will would be neither more nor less than blind impulse. To suppose this of the All-wise and omniscient Being, would not only be derogatory, but extremely absurd; and yet, we have those who tell us that God foresees things only from the fact that he has fore-ordained them. Such persons know not what they say. Before creation, God knew all possibilities; and seeing these, he determined on what it was best to adopt—best in order to fulfil the great purposes which were before His mind.

One other point—one that is not a matter of natural science but of revelation in scripture, I touch upon; first, because I have implicit confidence in scripture-statement; and second, because the knowledge of nature, as it increases, is sure to bring clearer light to bear on scripture truth. The point I refer to is that of a second Personality in God-head. That God should have *an alter ego*, brought out through Himself from the Impersonal All, seems to me the most natural and likely. There is nothing inconsistent in the statement that an image of himself should exist before the world was. We are no more hedged up from believing in this great revelation, than we are prevented from tracing the things that are, to a primary root and source. If we were better acquainted than we are with the capacities of substance, and its susceptibility of bringing out into manifestation another self—a beinghood after the manner of that which has been as a self-existence *ab*

eterno; and if we knew that the begetting of this Personality was essential to the production of inferior orders of creation, we should then know that it consists with the facts of Divine Personality, that there must be a Divine Fatherhood in connection with the everlasting Impersonality which accompanies His Beinghood; and that through this Impersonality there must be a representation of Himself. This commends itself to our thinking, though probably if left to ourselves, we should scarcely have discovered this as a necessary fact in the great field of nature. That the eternal offspring of God should himself be made the Builder and Framer of the world, as himself derived from the same inexhaustible Fountain of beinghood is, we think, at once rational and credible. And that the Father, in the prosecution of Intellection should devise and communicate his devices to the Son; and that the Son, as himself made of that which constitutes creation, should be so to speak Operator according to the will of the Father, is not only a revelation which we are asked to receive, but it is one in perfect consistency with reason as well as with revelation.

It does not concern me here to point out how the eternal Son must be regarded as the Holy Ghost of Scripture; and that He should communicate himself to, and manifest himself in, the person of Jesus Christ of Nazareth; but assuredly, when rightly interpreted and duly considered, there is nothing in the statements revealed that need be regarded as unnatural much less improbable. The fact of God being in Christ Jesus, is simply initiatory of the fact of God communicating himself to man as the foundation of a new nature; and the case of Christ seems to differ from the case of

true Christians, in that the fulness of the Divine mind was conveyed to Christ, and that he walked in entire obedience to Divine principles, and perfectly overcame the antagonistic influences that were inherent in the flesh, and that assailed him through this world and the devil. In this way Christ introduced and consolidated a new manhood, as the pattern after which we are to be formed.

APPENDIX I.

ON ETHER.



PROFESSOR STOKES says: "The fundamental hypothesis of the existence of a medium to which we give the name of Ether, I have already noticed. We might not have been disposed on the first instance to believe that such a solid material as glass really had Ether pervading it. But we must beware of applying to the mysterious Ether the gross notions which we get from the study of ponderable matter. The Ether is a substance, if substance it may be called, respecting the very existence of which our senses gives us no direct information: it is only through the intellect, by studying the phenomena which nature presents to us, and finding with what admirable simplicity those of light are explained by the supposition of the existence of an Ether, that we become convinced that there is such a thing. We know that a magnet attracts iron through a piece of glass; and yet the magnetic influence is one which we can neither see nor feel. Why then should not Ether exist within the glass and be capable of vibrating within it?"

"It may be readily supposed, as more probable than the contrary, that the presence of the ponderable molecules interspersed through the Ether, within the region of space, which is enclosed by the surface of the glass, may have the effect of altering the velocity of propagation of the Etherial vibrations within it, and very probably diminish it. But what may be the precise mechanism by which this result is brought about we do not know. It is easy to frame plausible hypotheses, which would account for the result; but it is quite another matter to establish a theory which will admit of, and which will sustain, cross questioning, in such a variety of ways, that we become convinced of its truth.

"Here it may be well to pause, and contemplate for a little the wonder with which our study of the phenomena up to the present point has shown that we are surrounded.

"First, we learn to regard the interplanetary and interstellar spaces as no mere void, or empty spaces passed through by swift messengers, in the shape of particles of light conveying information from distant worlds, but as filled with an ever-present, all pervading substance, in which the ultimate particles of ponderable matter, including those of our own bodies, are continually, as it were, bathed, and yet of which our senses give us no correct cognizance.

"Secondly, that whatever other important offices this Ether may fulfil, this one at any rate belongs to it, that it forms the medium of visual communication between ourselves and our fellow creatures, between ourselves and the various objects around us, between ourselves and distant worlds.

"Thirdly, that this communication is carried on by tremors of some kind propagated through the Ether, with a velocity so enormous, that for all practical purposes it may be deemed instantaneous. In fact, light would travel about seven and a half times round the whole earth in one second. But so rapid are these tremors that many hundreds of millions of millions take place in one second. Notwithstanding, therefore, the enormous rate of propagation, the lengths of the waves are excessively small, ranging about one fifty thousandth of an inch. Were the length of waves of light comparable with the length of the waves of sound, we should, as regards the use of our eyes, be merely in the condition of a man who was all but blind, who could just distinguish light from darkness, or a gleam of red from a gleam of green, and no more.

"Fourthly, we learn that notwithstanding the almost inconceivable shortness of the time of vibration, a variation in this periodic time is nevertheless recognisable by our senses, and that it is to this cause it is due, that the face of nature does not present to us light and shade like a photograph, but that we have that endless variety of colour that we enjoy.

"Fifthly, in the plan of an elastic medium, conveying small vibrations, we have a mechanism of the simplest possible kind,

having for the result, that rays of light from objects all around, cross each other's paths, in all sorts of ways, without any mutual disturbance.

"When we survey a varied landscape, each visible point in it, however minute, may be regarded as an independent source of light, from which the light proceeds in all directions. True, the objects are not in general self-luminous; they are seen by the light of the sun, or of the clouds, which they irregularly reflect; but as regards the behaviour of the pencils which proceed from them, they are as good as self-luminous.* Well then: from each visible point however minute, there enters the eye every second a length of light of about 186,000 miles, that in light which would have travelled that distance had not the eye been there to catch it, this immense length being filled with modulations of lengths ranging about 50,000 to an inch. And if the landscape be contemplated by a multitude of persons, from each visible point in that vast length of light, consisting of modulations of such excessive minuteness, enters the eye of each spectator every second of time; and all these various streams of light proceeding in all sorts of directions, cross each other's paths in all sorts of ways without the slightest mutual disturbance.†

* Professor Stokes speaks of "the pencils which proceed" from the objects around, saying that "they are as good as self-luminous." If they were self-luminous, we should fail to see them as we now do. It is because they are not self-luminous, that the objects lying in this ocean of luminiferous Ether, are pencilled forth in all their minuteness by a universal law, and are reflected on our eyes as in a mirror, and are conveyed in all their qualitative character along the optic nerve, and revealed as they are thus conveyed to the intellect.

† Professor Stokes states what is realized as an amazing fact; but he fails to philosophize upon the fact; when he might have abundantly shewn that Ether had and has characteristics which cannot be predicated of matter—characteristics which carrying forms in all directions, crossing and recrossing each other without collision and without confusion, indicate a power of endless service to which common matter can lay no claim.

"To one previously unacquainted with the subject, these statements seem like the dreams of an enthusiast, or at best the speculations of some wild theorist; and yet there is nothing in what I have stated, beyond the sober conclusions of scientific investigations—conclusions supported by an amount of evidence altogether overwhelming. In saying this, it is to be remembered that the precise work of the Ether has been left an open question." (*Nature of Light*, p. 85, etc.)

The Rev. Mr. Birks, Rector of Kelshall, Herts, as far back as 1862, tells us that for 28 years he had been engaged in prosecuting inquiries into the laws of Matter and of Ether. He says, (1) "The simplest view of matter, derived at once from the law of gravitation, is that it consists of monads or moveable centres of force, unextended but definite in position, which attract each other with a force varying inversely as the square of the distance between the centres. (2) The law of Gravitation in Matter so constituted will not alone account for the cohesion and solid structure of bodies. Either the law of gravitation must be modified for small distances, or there must be some other substance distinct from common matter on which the phenomena of cohesion depend. (3) A self-repulsive Ether, wholly distinct from common matter, also exists, and is diffused widely throughout all known space.* (4) No second fluid, of

* Mr. Birks quotes the closing words of the Principia of Newton, which are like a prophecy, as follows:—"I might add something about a certain very subtle spirit, which pervades dense bodies and lies hid in them, by the power of which, bodies at very small distances attract each other, and when brought close together cohere; and electrical bodies act at greater distances, attracting and repelling neighbouring bodies; and light is emitted, refracted and reflected, and warms bodies; and sensation is excited, and the limbs of animals are moved at will, through vibrations of this spirit, propagated through the nerves to the brain, and from the brain to the muscles. But these things cannot be expounded in a few words; nor is there extant a sufficient abundance of experiments by which the laws of the activity of this spirit could be accurately determined." Mr. Birks also quotes from Sir Isaac Newton's Optics, the same thought in the modest form of queries, as follows:—"Is not heat conveyed through a vacuum by the vibrations of a much more subtle medium than air? Is not this medium the source by which light is re-

caloric, of electricity, or of magnetism, ought to be recognized, until it can be proved that the action and reaction of common matter, and a luminous Ether are incapable of supplying the required explanation. (5) The existence of Matter and of Ether requires the admission of three and only three laws of force for their mutual action—First, matter acting on matter—second, matter acting on Ether, and Ether on matter—third, Ether acting on Ether: these two unknown laws cannot be the same with gravitation, or vary only as the inverse square. (6) The Ether of the Universe greatly exceeds in quantity or in the number of its atoms the amount of ponderable matter. (7) The mean distance of the particles of free Ether must be less and is probably far less than one ten millionth of an inch. (8) The pressure of the Ether on any surface must be immensely great. (9) The action of matter on Ether must vary as the inverse cube or some higher law, and the repulsion of Ether on Ether as the inverse fourth or some higher integer power. (10) The three laws of force imply two independent constants, and two other results from the actual constitution of Ether in space and of material bodies."

We cannot regard Mr. Birks' view of matter or of Ether as sound, for reasons which will afterwards appear; but as he farther in his chapter on the nature and properties of light has more to say on Ether, it is well to take an account of his additional statements as taken from the theory stated by Sir John Herschel in the *Enc. Metr.*, as follows. "(1) An excessively rare and elastic Ether pervades all space. (2) It pervades all material bodies, and occupies the interval between their mole-

fracted and reflected, and communicates heat to bodies, and is put into fits of easy reflexion and transmission? Do not hot bodies communicate their heat to cold ones by the vibrations of this medium? And is it not exceedingly more rare and subtle than air, and exceedingly more elastic and active? And does it not readily pervade all bodies? And is it not by its elastic force expanded through all the heavens?" The sagacity of Newton properly divined not only the existence but in some respects the characteristics of Ether; but Mr. Birks mistakes these, when he speaks of Ether as self-repulsive; for Ether absolutely *per se* can have no preferences and therefore no action, but is the servitor of the affinities communicated by material objects.

cules. (3) Ether by passing between them or by its extreme rarity, offers no resistance to the motion of the earth, planets, and comets, appreciable by the most delicate observations. (4) The molecules are capable of being set in motion by the particles of matter, and of communicating motion to the particles which are adjacent. (5) It is less elastic in refractory bodies. (6) The frequency of the pulses or number of impulses made on our nerves in a given time, determines the colour of the light, and the amplitude of the excursions, its brightness or intensity."

Thereafter, Mr. Birks sets forth a number of grounds whereby Ether explains the Reflection and Refraction of light, and accounts for the dispersion of light, the polarization of light, circular polarization, and the probable relation between radiant heat and light, as well as the relations between light and sound with respect to the variety of musical tones and of coloured rays.

I have only now to make a few remarks on the characteristics assigned to Ether by our author. In common with almost all writers, he terms Ether "an excessively rare and elastic medium pervading all space." This, as a generally superficial definition, may be regarded as good, if we understand the use here made of the term "elastic." Elastic must mean not only the property of springing back to its original form after tension, but mainly and peculiarly the power of being indefinitely extended, so that when preoccupied at one point, it may always have a fresh surface for any new form that may be presented, and this *in eodem loco*.

It is said to pervade all material bodies, but only to occupy the intervals between their molecules. This statement, I regard as a misapprehension. It implies that the particles of matter are impenetrable by Ether, whereas the law seems to be that Ether enters into the very bosom of matter, and without affecting the conditions of matter, itself takes on these conditions, and shares them, with this distinction betwixt itself and matter, that the latter are expressed in a gross or thickened aspect, while the former expresses the same quality and form in an essentially spirit state.

Again, it is said, Ether offers no resistance to the motions of the heavenly bodies. This fact ought to go to prove that Ether

is of a spirit-nature; for if it were anything like ponderable matter, it behoves that there should be resistance. But in respect of motion, as well as every other condition of material objects, there is no doubt that the Ether sympathises with these movements, and finds corresponding expression in itself. Our author, somewhat out of consistency with the non-resistance of Ether, says,—“the pressure of Ether on any surface must be immensely great.” He compares the velocity of sound with that of light, and observing that the velocity of a vibration varies as the square root of the pressure of Ether must be $13\frac{1}{2}$ billions of pounds on the square inch, whereas that of air is only about 15 pounds to the square inch. But if he had duly apprehended the character of Ether, he would have found that it exerts no pressure whatever, but is entirely negative in that respect, and is receptive, as noticed, of the characteristics of quality and condition and form as pertaining to matter, save the fact of its crassness.

Our author has regarded Ether as self-repulsive. He draws this inference from the fact that light travels through Ether with such enormous rapidity; for, he says—“if its particles were mutually attractive, they would evidently condense around centres, when there was any excess of density at first; and light could not pass from one of these condensing systems to another.” Hence, he infers that mutual repulsions must be one of its fundamental laws. Surely the inference must be the extraordinary attraction of Ether for the condition of light. What is light? It is one of the conditions of matter, and so great is the affinity of Ether for that condition that it takes it on with amazing readiness, and spreads it with inconceivable rapidity. He speaks of the particles of Ether as if they were atomic and separable like matter, indicating that in his day, however strange and puerile Ether had been suspected to be, Mr. Birks and others had failed to guess its real character.

Again, it is noticed that “the existence of matter and Ether requires the admission of three and only three laws of force; first, matter acting on matter; second, matter acting on Ether, and Ether on matter; and third, Ether acting on Ether.” It is very doubtful whether matter acts directly on matter, that is apart from the connecting link of Ether, save mechanically

when one body comes into collision with another. We believe that the cohesion of the particles of matter is produced by means of the all pervading Ether, which, taking on the affinities of the particles, binds them together according to the law of attraction which inherently pertains to them. There is, therefore, the operation of two great laws only, viz., that of matter upon Ether, and that of Ether upon matter. First of all, by the creation of matter with its qualities and conditions, we have Ether assuming the same qualities and conditions, while yet retaining its consistency as spirit-substance, and projecting those diminishing inversely as the square of the distance increases. When two material bodies therefore meet at a distance from one another, yet within the range of their respective affinities, they affect one another precisely as if the etherial representation were one solid mass with the bodies themselves, and thus we account for the great doctrine of gravitation.

The author speaks of the particles of Ether, and says, "the mean distance of the particles of free Ether must be less, and probably far less than one ten millionth of an inch." Like others who have treated of the great question of Ether, he speaks of the particles or atoms of which it is composed. One would think that it should have occurred to these great men to see from the fact of its extraordinary elasticity, to which all of them refer, that it must be of an absolutely continuous nature. We have not only referred to the absolute impossibility of finding, or of procuring a vacuum, in which Ether is not persistently present, but the very fact also of that endless elasticity, whereby it is so expanded as to present a fresh and free front to every additional object that has to be represented therein, and fulfils that representation notwithstanding any pre-occupation, ought to convince us that there is nothing of a finite character pertaining to it. Matter is seen and known to us to be of a finite character, and whatever may be the nature of the atoms into which it is divisible, there can be no doubt that it is separable into atoms.

It may be allowed that there is Ether in one set of circumstances more rare, and in another set of circumstances more dense, according as it is absolutely free from all or any influence spent upon it from any body of matter, or when the space is occupied by a series of representations such as the earth and the

various conditions of the earth, and in addition to the conditions pertaining to electricity and magnetism, and varied individual delineations. Hence, it may be that there is a condensed Ether, as well as an Ether of still higher tenuity. Of course, the Ether would in these circumstances be most condensed in solid bodies, and hence, while the free passage of forms in light might be open for many repetitions in the free atmosphere, it is quite conceivable that a limit must be had to the transmission and re-transmission of messages through the telegraphic wire. It is also quite conceivable that the velocity of a wave or pulse of Ether in travelling through a liquid or transparent solid must be affected by the affinity of the solid or fluid atoms. Refraction seems to depend on density. Light must have an equal movement so long as the wave travels in undisturbed Ether; but when it is permanently condensed, as in certain transparent solids, the path of the wave takes a lateral direction.

It has been thought difficult to explain what has been called circular polarization as compared with common light. We have but one explanation that is satisfactory, and it is this, that in the projection of an object and its circumstantials in the medium of Ether, the precise lines which characterize the object, are represented as they are contained in the original.

There is a relation betwixt the vibrations of light and those of sound; but the one is a tremor of pure Ether and the other has its initial utterance in air; and hence the slowness of the latter passage compared with the former.

We have much to add to the characteristics of Ether, which will be found in the effort made by this publication to make known its properties generally.

APPENDIX II.

ON CAUSALITY, AND THE BEING OF THE PERSONAL GOD.

THERE are two axioms which arise as simple and necessary inferences in connection with human experience, and which all reasonable beings have to agree to, who are able to enter on the question: these are, first, "that every effect must have a cause," and, second, that "the effect cannot contain more in it than belongs to the cause." It may be asked—what is a cause, and what is an effect, and how do they stand related to one another? These are proper enough questions. We must have an understanding as to what a thing is before we can truly pronounce upon its characteristics. We define a cause, then, to be *that assemblage of ingredients which when combined produces a definite result.** It is obvious, then, that cause and effect are correlative

* Many have wondered why it happens in the case of every rational being, that there is this belief, that every cause must have its effect, and that every effect must have its cause; but practically this is what a child is learning every moment of its developing existence. Every mechanical movement is an illustration of cause and effect. One cannot shut the door, cannot take food, cannot stir the fire, but there is hereby the operation of cause and effect. A child cannot see a new toy brought into his nursery, or an old toy removed from it, but he observes cause and effect conjoined. A child from experience knows that there would be a serious effect if his toy were put into the fire, or if a pair of nippers were to be applied to one of his fingers. In construction also, the child learns the connexion betwixt cause and effect. He sees a doll dressed, or he sees a house made of wooden blocks, or he may come to assist in piecing the cuttings which go to make a map or picture: when therefore the effect is shewn he can state the cause. In this way the relation of cause and effect becomes unconsciously familiar to him.

terms for one and the same thing, the difference being the cause is the *ingredients* in contiguity in order to their combination; and effect is the *accomplishment* of the combination. Cause and effect imply one and the same array of factors; but the relationship is different. In the cause we have respect to the particular and specific elements which enter into the combination; in the effect we have respect to their conglomeration into one whole. When, however, a combination of elements has been once effected, there may be introduced an additional ingredient, which ingredient, of course, produces a *change* in the result. We speak of that ingredient, therefore, as the cause of this change; but in respect of the whole question, that ingredient is but an individual factor whereby the result as a whole is constituted.

Having premised this much respecting the intimate relation which subsists between cause and effect, we come now to the absolute and uncaused *Ground* which lies obviously before us, viz., that of an infinite Ether, which as a medium we have seen is one continued and unbroken unity and uniformity throughout, in itself undisturbed, save in so far only as it is affected by the individual objects with which space is filled. These objects without exception bear on them the marks of *construction*, in as far as they shew the adaptation of things in themselves independent of one another, and which have in themselves no natural connexion, brought together and conjoined obviously in the fulfilment of a purpose. Supposing these constructed objects to be out of the way, and removed entirely, what have we to all appearance left? We have simply the universal Ether—an Ether to which we can ascribe no limit, and, therefore we naturally or necessarily predicate respecting it, that such has the characteristic of infinite substance. That is, we have hereby a spirit-substance, as the absolute basis of beinghood, in one continuous and boundless existence. In these circumstances, it is utterly impossible to conceive the beginning of a disturbance. As existing *in equilibrio* by itself, there is nothing to derange that equilibrium, under the supposition of an absolute substance without parts. If there comes to be an agitation of this universal substance, it behoves that there must have been a cause; and that cause must have been an ingredient in some sense out of itself. We

can have no conception of cause, apart from a plurality of conditions.

Looking, then, to the facts of the world as they stand before us, we are necessarily shut up to the conclusion, that there behoved to be in a sense outside the universal substance, a positive entity, having the power of creating a change of condition. What this power might be has been the theme of many a pen. Happily, there is no antagonism among parties as to the great fact of there being a root, a *positive root*, from which all derived existences are supposed to have sprung. The sole question has been, as to the nature of this initiatory beginning of individualism. Some will have it that it was inherent in the primal substance, and that it has spontaneously developed in the course of many ages into the diversity which we presently see in the world.*

Such a conclusion is a contradiction of all our experiences touching the great question of cause and effect. How spontaneity in mere substance should, in the negation of movement, begin to move—how it should come to operate by itself, in adding structure to structure, without an antecedent active power to introduce at least the nucleus of that structure, utterly baffles us to comprehend, or even how there should be a development in nature to the attainment through a long series of varied creatures, to an individual such as man, with reasoning powers and a designing mind, apart from, and independent of, a great Original, as the comprehension in himself of existing organization and of existing capacities, is what I cannot imagine. Such a

* The standpoint in the philosophy of Hegel is to our view utterly inadmissible. No doubt that standpoint, as well as that of Schelling, was primarily an absolute identity, in which thought and being were one; but how this absolute One or All should have had a beginning of movement is the difficulty. To talk of a "becoming," or an evolution of the concrete, indicates a state of unrest, and destroys the absoluteness of the oneness. No doubt we may speak of a germ-cell as one; and in virtue of the modifications within it these develop into the many. So they do; but this only in virtue of the cell being implanted in a suitable medium; but where is the absolute oneness in this case? The question is, How is that which is absolutely one and undivided, to begin movement, if there was no movement before? There can be no self-determination in absolute and uniform, or rather formless, oneness.

conclusion is a drawing on the credulity of rational beings in a most unnatural fashion. It is not reason that we should guess at, and adopt as possibilities, what lies beyond and out of the line of our experiences. We ought to be true to ourselves, and follow the leadings of only rational argument.

There are no such experiences as are here postulated. True, we have the experiences of natural laws, as they are presently conducted in the world. But what are these? Unquestionably, they are comprehended in this formula, that each creature produces after its kind, with such deviations within the circle of the species, as the accidents of interposing influences may engender. To such deviations we give the name of *evolution*. Every fresh inquiry confirms this conclusion. We have learned to know, therefore, what is the *law of propagation*. It is a law entirely congruous to, and confirmatory of, cause and effect. And whatever changes may be effected in the processes of propagation, there is nothing in the effect, but that which is contained in the cause, in as far as the influences which have been operating in the combination, were they known, would be sufficient to account for all results.

We are shut up to this conclusion that propagation, is a totally different thing from construction *ab initio*; and still further to the conclusion, that as *propagation cannot introduce creations de novo*, so we must have resource to a designing and constructive Mind at the foundation, and before all existing things, as the primary Source from which they are as creatures derived.

What, therefore, can we say generally of the Personal Fountain of all being, but that He must be regarded as fundamentally the Absolute comprehension as a *Cause of all* possible conditions, in *positive primitive expression*; even as the Impersonal ground must be regarded as fundamentally in like manner the absolute comprehension, as a *basis of all* possible conditions in *latent inexpression*. The one is to be considered as the exact counterpart of the other; and the two departments go to make up one entire and perfect whole, through which there is a possible generation of the heavens and of the earth, and all the objects that are therein. Beyond this, it does not seem possible for us to go; but thus far we are clearly led. And we can only

wonder that intelligent men can be found who can think that Agnosticism, or the unknowableness of an absolute first Cause, has a foot to stand upon.

As to what constitutes the oneness of the primordial personal Cause, it is not easy to speak. The doctrine of Causality, as indicating movement in virtue of the communism of at least a diversity of qualities co-existing in the same organic unity, constrains us to come to the conclusion that to the personal Deity this diversity must be held as applicable. How or in what way this variety in unity subsists in God is not for us to say. But that variety of condition must needs primarily be in some form or another, and existing too, under limitations, whereby alone limitations can be produced, is not to be doubted for a moment, while, at the same time this variety as conjoined in the unity of a perfect combination, must also be received. And this, in like manner, must be envisaged in the thought of a personal God, that, while he has the platform of infinity before him, as affording endless scope for the production of works (or shall I say worlds ?) without limit, the conditions of his being must be regarded as fundamentally such, that out of those conditions he is able to minister the *types* of things in the universe, and by means of these types to draw forth from the exhaustless source of the impersonal and unconditioned, the stores wherewith the universe is filled.

Thus we are brought face to face with what we regard as a great fact, that, while we first of all reach a universal spirit-substance *generic* in respect of Quality and of Energy, we are also of necessity brought into immediate cognisance of an absolute spirit-substance having *particulars* in respect of Quality and Energy:—that the former must be regarded as in itself absolute *Impersonality*, and by itself utterly incapable of originating any definite or express condition or conditions as particulars, or indeed of beginning any movement whatever: while the latter, being a formal manifestation of fundamental Qualities and Powers, as the primal constitution of his beinghood, and omnipotence must be regarded as absolute *Personality*:—that the former, as containing in its bosom the exhaustless substance, which is the quarry of the particulars of the universe, is also the *basis* on which all beinghood rests, while the latter is

the *Source* or *Original* by which all creaturehood is fundamentally constructed; and that the two are practically one entire Absolute, as the only perfect complement, which accounts for the introduction of the worlds and their contents. The latter is the positive aspect of primitive being—the underived substantial Individuality, and must be regarded as the Absolute Form (whatever that may mean) in the self-subsisting unity of its Qualities—as the full Expression positively of the inner possibilities which lie negatively in the Unconditioned, but not Unqualified Impersonality;* and therefore the Personal is the Source and Spring of movement, and the Originator of all derived conditions with their respective adjustments and laws of operation. We have completest evidence for the existence of an absolute Personality, as co-existing, on the platform of an absolute Impersonality—a Personality which is the exact connaturalness of all that is contained in the Impersonality, with this distinction, that the one contains in Himself in positive manifestation, what lies hidden and concealed in the other. Without the positive Existence, embracing in its bosom the fundamental qualities, out of which all action proceeds, there could be no mind, and no movement in accordance with mind; and therefore no manifestation of being; and without the pregnant soil of the Unconditioned, as at once the ground to work upon, and the mine to respond to every call made upon it, there could have been no production of beinghood and no inbringing of the world in any form. The Personal without the Impersonal would have been power without the possibility of putting it into practical action. The Impersonal without the Personal, would have been material without the power of being modified into condition and form.

What follows from the great fact of their co-existence is the process of creation of which we can grasp some idea. First (as we conceive), there had to be set forth the primary elements as the alphabet of creation—of the varied substance of the world. What these elements were, it is unnecessary here to inquire,

* The Unconditioned of Hamilton was made to be also the Unqualified. We have before noticed that there is no such entity as substance without a basis of Quality. But there may be Quality without Conditions. Conditions are the mere accidents under which Quality is manifested.

but, coming from the self-same fountain, they would naturally have the affinity of attraction for one another when placed in a certain relationship to one another, and the terms of their union, we can understand could be determined, while, if the relationship were changed it would follow that the attraction would be changed; and it might be into repulsion. Second, we can understand that there had to be such a variety of these as would be adapted for the matter of the universe. The letters of the alphabet, as illustrating the primary elements, by their union first into words, and then words into sentences, will point out the mode of compound union in regard to the composition of matter. In the construction of matter as inorganic, we find attention given to the arrangements adapted for crystallization. And finally, as a preparation for the organic department, we find the introduction of a structural cell with this proviso, that beginning with the simplest of all, item after item seems to be enfolded therein, and made to develop each its separate inclusion in growth; and another and still higher organization seems to be imparted to the cell as the type of a higher stage, and so on until the case of man was reached, when, of course, the cell could develop no more than what had primarily been bound up in its prerogatives. The difficulty of believing in the fact of a vast number of separate branches of bodily structure, and as in the case of man, being all involved within a very very small compass such as a single cell, is not greater than the fact which we know to be illustrated in the case of Ether, holding in separate distinctness a vast multitude of separate forms; or in the case of a human soul being filled with thousands upon thousands of separate ideas constituting one's knowledge, as we know to be a fact patent to all.

One of the great difficulties in the conception of Deity, has been the assignment of limitation to Him, and consequently, in looking simply to the infinite to show how the finite could emanate from Him; but to Him belongs limitation and non-limitation—limitation in respect to form for the construction of forms, but non-limitation in respect to the extent and variety of the forms that might be brought upon the stage of the universe. Without both, perfection would be wanting.

There is another representation of Deity made known par-

ticularly in the New Testament, which is presented to us as the counterpart of that which stands in its intrinsic originality. We should naturally have no knowledge of this representation, were it not a revelation specially made to us, and that in a book that comes to us with an overwhelming evidence of its authenticity and genuineness. How this Image of the Original Personality came to be introduced, we do not know; but this we must know, that, while the Personality which is original and underived, must remain in its intrinsic and essential Form of Beinghood, that which is begotten must be regarded as a derived Form of the same, but generated through the unconditioned Impersonality.* Whether *mirrored* therein, and made a fixture therefrom, as is not impossible or unlikely, it is not for us to pronounce; but if so, it could only be the beginning of that great analogy, according to which we have presumed that all that is in the world is formed.

Though it does not fall to us to consider theology so far as it is revealed to us in the Scriptures, this question of what is therein called "the only begotten Son of God" is of such enormous moment to those receiving the Scriptures as genuine, that a few words on the subject may not be regarded as altogether irrelevant; and we may readily take up the language of the Nicene creed and regard this counterpart of the Form of God as "begotten of the Father before all worlds." We may say this, that while without the Divine record it would in all probability never have occurred to us, that such a production as an entire Image of God, in proper Personality, should have engaged our thoughts as a sober reality apart from the revelation of the fact, yet the fact, when fairly considered, is far from being beyond the range of our ordinary thinking. All we can say is, that it is the Personal reflected through the Impersonal. And if we

* Let it be noted, that while we speak of the unconditioned Impersonality, we do not imply an unqualified Impersonality. We have asserted that Quality lies at the foundation of all substance, and constitutes the foundation of primal substance; but then, primal substance in its absolute state is without conditions. Conditions are the modifications which are contingent on particular substances; and contingencies do not exist in the Absolute.

consider the great purpose which "the only begotten Son" was employed to fulfil, viz., to operate as the Supreme Agent by whom creation should be practically introduced, while the Father devised and originated the scheme of things which had to be introduced, it follows that He must be one with the Father, as receiving the purposes and plans, for the accomplishment of which He was delegated by the Father to fulfil.

While touching upon this theme of a plurality of Personalities it may be asked where is the Trinity of the orthodox churches; for we here present but a simple Duality? Before coming to the question of Trinity, it may be mentioned that, in the Eternal Son we have all that is demanded by Old Testament teaching under the name of the Holy Ghost. It was He by whom prophets spake. What then? It humbly appears to the writer, that the *pleroma* or fulness of the Divine Son, as the Eternal Spirit, was reflected in the soul of Jesus Christ, and that this constituted the personality of Christ to be in oneness with the Eternal Son. Assuredly this view answers all the intimations of Holy Writ, in as far as it sets forth Christ as made after the manner of men, and yet in respect of his acquisition of the Eternal Sonship "without measure" or stint, it makes him to be classified as in point of fact He who made the worlds. It does occur to me that the view here stated, which makes Christ one with the Eternal Spirit, and as one whose name is made a convertible term with the Eternal Spirit—(see Rom. VIII. 9, 10)—fulfils the intimation of sacred Scripture, while yet the invented term of "Trinity" is hardly appropriate—a term nowhere found in the Holy Word of God. While this view ascribes the Divine nature emphatically to Jesus Christ, it does away with that tremendous mystery which attaches to a personal change taking place in the Eternal Son, as actually divesting himself of his position as such: the whole truth being, that he imparts or applies the fulness of his own mental sphere to Jesus Christ. This view, moreover, sets forth the grand analogy of the diffusion of this same Holy Ghost, being given through Christ to the church for all believers, who are declared by Peter and Paul to be partakers of the Divine nature. This view, moreover, confirms all New Testament doctrine in respect of the precious blood of Christ. What is the sprinkling of the *blood* of Christ "but the

bestowment of that which constitutes the *life* of Christ, which is "the blood of the New Testament"—the grace of God which bringeth salvation? There is no other blood which reaches unto us: there is no other blood that can reach unto us, for the blood of the body was sacrificed and therefore put out of the way; but the blood of God (so called) which constitutes the life of God in the soul of man, is vouchsafed for all who are open to receive it.

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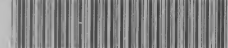
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